IOHANNES PETTVS EQVES
AVRATVS HIC TACENS ILLIC SCRIBENS
ALIBI LOQVENS. AGENS PATIENS Ætat. 57.
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Fodinæ Regales.

OR THE

HISTORY, LAWS AND PLACES OF THE Chief Mines and Mineral Works in *England*, *Wales*, and the *Engliſh Pale* in *Ireland*.

As alſo of the MINT and MONY.

WITH

A CLAVIS Explaining ſome difficult Words relating to Mines, &c.

By Sir JOHN PETTUS, Knight.

LONDON:
Printed by *H. L.* and *R. B.* for *Thomas Baſſet* at the George in Fleetſtreet, near Cliffords Inne.
M. DC. LXX.

Hodina Regales.

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in Fleet-street, near Clifford's Inn.
M. DC. LXX.

To His HIGHNESSE

Prince Rupert,

Count-Palatine of the *Rhine*, Duke of *Cumberland*, Knight of the Most Noble Order of the Garter, Constable of *Windsor*-Castle, Chief Governor of the *Mynes-Royal* and *Mineral* Works in *England*, &c. And one of His MAJESTIES most Honourable PRIVY COUNCIL.

SIR,

THIS *Treatise of the* Mines *Humbly submits it self to Your* Patronage, *and the rather, because as I therein observe, at every* 70 *Years some signal Occurrence* revived *them to our* Memories; *for in the sixth of* Eliz. *after several* 70 *Years, a* German *gave us the cleareſt* Guidance *to their* Conduct; *And your* HIGHNESSE *about* 70 *Years after made them very useful to his late* MAJESTIES Martial Affairs *during the* Civil Wars: *and now in time of Peace, we have made choice of you for our* Chief Governor *to both* Societies: *But in respect you were not privy to the* Grants *and* Priviledges *belonging to us, I conceive this short* History *or rather* Abstract *of what concerns us, may be acceptable to you; I confess, they are unfit for your Perusal, were not my* Intents *more zealously employed upon higher* Advantages,

as your Highneſs *may collect from my fifth and ſixth Chapters; for I think it requiſite that the* Countreys *and* Villages, *where ſuch* Mines *and* Minerals *are, ſhould be exactly and* publickly *known, which I ſhall in time divulge (with the like for* Plants) *whereby ſuch* Metalliſts, Mineraliſts, Botanniſts, *or other* Artiſts, *who have occaſion to uſe them, need not trouble* forein parts; *for with more* eaſe *and as much* plenty, *they may be ſupplied at* home. *But not to trouble your* Highneſs *further, I was under your* Command *in the late* Wars, *where I was in part witneſs to your great* Conduct, *and* Heroick Acts, *and I am now once more under your* Command *in the* Affairs *of the* Mines, *whereby I have alſo obſerved your incomparable* skill *and general* Knowledge *in the* leſſer Arts *and* greater Sciences, *worthy of a* Princes *Recreation and* Study, *all in their kind tending to ſome publick* good, *and to inſpect them no diminution of* Greatneſs, *and in theſe wherein your* Judgement *may conceive my* Capacity *extendable, be pleaſed freely to Command,*

SIR,

Your moſt Humble, Obedient, and Obliged Servant,

JO. PETTUS.

Anno 1670.

To the Right Honourable

The Lord Aſhley,

Chancellor of the Exchequer, one of the Governors of the Mines Royal, and Mineral Works, and of His MAJESTIES PRIVY COUNCIL.

MY LORD,

THIS *Treatiſe* preſents it ſelf alſo for your Lordſhips *Concurrence*, wherein I have clearly ſtated the *Kings* Intereſt in our *Mines* by his *Prerogative*, according to the moſt ancient and beſt *Record*; I have alſo added the particular *Cuſtomes* of ſome *Counties*, and other Diſcourſes of things relating to our *Societies*. And I did once reſolve to have inſerted, *firſt* the *reaſons* why we do not make ſuch benefit of our *Mines* and *Minerals* as we might do; and *ſecondly*, the *remedies* which may be uſed for the better managing of them; But I do forbear to publiſh them, becauſe I have ſeen the bad effects of *Printing* thoſe worthy *Deſigns* concerning *Fiſhing*, the *Guiny Trade*, and *Farthings*, &c. for if they had been only in the breaſt of the *State*, till every *circumſtance* and *oppoſition* had been well *weigh'd*, *reſolved*, and (unexpected to others) put in *execution*, they would have redounded much more to the *publick* advantage: And this Affair of our *native Mines* and *Metals* is much of the like nature,

for I conceive the *King* and *Kingdoms* Intereſt is *firſt* to be conſidered; *Next*, how the *Proprietors* may be ſo ſweetned by profit to them, that they may not only concurre in *voluntary Diſcoveries*, but aſſiſt in their *Operations*, (and this may be done without diminution of the *Kings Prerogative*;) *Thirdly*, how we may ſupplant *Foreiners* herein, who hitherto have *ſupplanted* us; *Fourthly*, how to countenance *Diſcoverers*, either by *rewards* or *aſſiſtance*; *Fifthly*, to encourage *Leſſees*, and to prevent their *fraud*, of which hitherto many have been too guilty; And *laſtly*, how by theſe to make ſome honeſt and reaſonable *profit* to our ſelves. And that theſe may be the better digeſted, it is humbly recommended to your *Lordſhip*, That a *Committee* of the *Societies* may be choſen (being upon Oath) which may *Modell* theſe *Heads*, or more, into fit *Repreſentations* to His MAJESTIE; and according to his *Approbation*, the *Societies* to put them in *action*; and to *them* I ſhall be ready to repreſent my thoughts and *Conſiderations*, with a conſtant recourſe to your *Lordſhips Univerſal Knowledge*, which may direct us in the moſt *facile* way of *effecting* what is aimed at, by,

My Lord,
Your Lordſhips moſt Humble and faithful Servant,

Anno 1670.

JO. PETTUS.

TO MY HONOURED FRIENDS OF THE SOCIETIES OF THE Mines and Mineral Works in this Hiſtory Mentioned.

ABout *Twelve Years ſince you were pleaſed freely to make me a* Participant *in both your* Societies, *to gratifie which Favours I have ever ſince ſtudied and endeavoured your* Services, *and at ſome of our Meetings Conſiderations being had that it was fitting to make our* Societies *more* publickly *known, for the benefit of* Leſſees *and* Diſcoverers *of* Mines, &c. *I reſolved to write, and by the Encouragements of my Honoured Friends Sir* Robert Murray *and Sir* Francis Cobb, *and ſome of the* Long Robe, *both* Common *and* Civil, *and the help of our own* Records, *I have at laſt produced this* Hiſtory, *wherein I can call nothing my own but the imperfect* Method, Style, *ſome few* Obſervations, *and the* pleaſure *I took in finding ſuch a worthy* Diverſion *from* Idleneſſe.

It is the first Collection *extant of this* kind, *and if I have pleased you herein, and facilitated the way to any future* Additions *by others, I hope to receive their thanks, and yours, which is all that is expected by*

Your Grateful Friend

and Servant,

Anno 1670.

TO. PETTUS.

AN

AN INTRODUCTION TO THIS HISTORY.

THE Usual *Method* of *Historians* is to to begin with the *Creation* wherein I might tell you, that when *GOD* breathed upon the Face of the *Waters*, that was a *Putrefying Breath*; and that such *Waters* as were quiet and *calm* turned into *Plains* or Levelled Earth, and the *Boisterous Waters* into *Hills* and *Mountains*; according to the proportion of the *Billows*, and their *Spaces* into *Vallies*, which have ever since continued in those wonderful and pleasant *Dimensions*, the Seminal *Virtues* of all *Sublunary* things being locked up, and more durably *preserved* in them; and yet from thence they are transmitted through *Terrene Pores*, either from their own *Exuberancies*, or the *Sun* or *Stars Extractions* into *various* and *visible Forms*: and these *Extramissions* may be the better conjectured, because many do write of *Subterranean Trees*, *Serpents*, *Fishes*, &c. which in their confined *Bulks* cannot *transmit* themselves, but by the *Effluctions* of those *Seminaries* do force their *Appearance* upon the *Surface* of the *Earth* in more delightful *Shapes*. And such *Superficial Excressencies* (whether *Vegetables* or *Minerals*) do direct the *Miners* in their Knowledge

ledge of the Nature of the *Metals* under them; which ſometimes alſo is done by the *Virgula Divina*, or *Magical Rod* (being no other then an *Hazel Stick* cut in a certain ſeaſon of the *Stars Aſpects*) ſtill ſhewing what rare *Congruity* there is between the *Stars*, *Plants*, *Animals* and *Minerals*; as if they were but the *ſoft Products* of thoſe *Meditullian Putrefactions*. And it is alſo obſervable, that in all Operations of *Metals*, before they be fit for uſe, they are reduced into *Water* or a certain *Liquidity*, ſhewing that their firſt matter was *Water* (as I ſaid, and) as many *Philoſophers* do hold, and we ſee that onely *Fire* can reform theſe *Condenſations* into their firſt *Principles*.

And now I ſpeak of *Fire*, I might alſo diſcourſe of the ſtrange nature of *Bone-aſhes*, (of which our greater and leſſer *Teſts* are made) ſo reſiſtible of that *Element*, that if any one would write of the *Nature of Oſtiologie*, good Arguments might be raiſed for the *Reſurrection* of our dry *Bones* with their attending *Spirits*, without diſturbance to the Power of the *General Conflagration*; my Conſiderations herein being founded upon the Opinion of ſome *Rabbins*, who held the *Reſurrection* of Mans Bodie ſhall be by means of a certain *incorruptible Bone* in him.

After the formal *Hiſtorian* hath vented his *Philoſophy* about the *Creation*, he uſually proceeds to *Adam*, of whom alſo I might tell you, that he may be eſteemed a *Miner* from the *Text*; where 'tis ſaid, that God placed him in *Paradiſe*, and commanded him to *dig* or till the *Earth*: As alſo a *Refiner*; otherwiſe, why ſhould it be made known to him, that the *River Piſon* did encompaſs the Land of *Havilah* where *Gold* was, if *Adam* were not to *waſh* and *refine* it from the leſs valuable *Earth*? And the Knowledge of this was part of *Adams Wiſdom*, for *Gold* (if I interpret it right) is *relative* to *Wiſdom*, when

Gen. 2.

'tis

'tis ſaid, that *God* filled all things with his *Wiſdom*, as *Piſon*, (*Piſon* being mentioned in no other places of Scripture) as the onely *River* that encompaſſed *Gold*; and nothing ſhews our *Wiſdom* more, then the *compaſſing* or getring of *Gold* by proper *courſes*, and then the wiſe uſe of it, and the *Sciences* belonging to it: and doubtleſs the great plentie of *Gold* with which *Solomon* had ſtored himſelf, made him be eſteemed the *wiſer*. And it is not to be omitted, that the three Wiſe Men of the *Eaſt* in their Wiſdom thought it a *Preſent* fit for a *Saviour*. *Eccluſ.24.27*

I might alſo inform ſuch men as think it not *lawful* to meddle with any thing that is not mentioned in *Scripture*, that for their comfort *Six* of the *Seven Metals* are there often repeated; *viz. Gold*, *Silver*, *Tin*, *Copper* (or *Braſs*,) *Iron*, and *Lead*; but *Quickſilver* is not, yet inſtead thereof *Amber* is, of which two there is diverſitie of opinions, which ſhould be the *ſeventh Metall*, they that deny the *ſeventh* place to *Quickſilver*, ſay it is but *Silver liquid*, and included in *Silver*, and ſo *Amber* may come in as the *ſeventh*, and the rather becauſe *Scripture* mentions it. Now *Pliny* and the *Civil Laws* make three ſorts of *Amber*, which the Latine calls *Electrum*, one the *gumme* or natural *juice* of a *tree*, the other found in *Aethiopia* in large Pieces, not known to proceed from *Trees*; the third is a natural *Compoſition* of *Gold*, and a fifth Part of *Silver*, according to *Pliny*, which upon diſſolution it is found to contain; and this is the true *Electrum*, or *Metallick Amber*, or ſeventh *Metal*, and the *Scriptures* have ſuch eſteem of it, that where the Text ſpeaks of a *Viſion* (the *vulgar* and *Chaldee Tranſlators* ſay the *viſion* was *quaſi Aſpectum Electri*, like *the Aſpect of Amber*; but the *Syriack* ſaith, the *Viſion* was *quaſi Aſpectum Dei*, like the *Aſpect of God*; ſo great eſteem had this *Electrum* in the world, that they could not parallel the deſcription of it to any thing, but the *Aſpect of God himſelf*, which modeſtly *Ezek. 8.2.*

deſtly is to be underſtood, that no *Celeſtial* or *Terreſtrial* things have equal *reſplendency* to it: And therefore if *Adam* had any notice of it, it might then have been properly placed the *firſt* of *Metals*; but ſince it is not, let it ſatisfie them to ſtand in the *ſeventh* place, becauſe it is in the *Scripture*, and not *Quicksilver*, and was known to former Ages, though not to us, unleſs what is imitated by *Art*: And as I have given you a hint of ſome obſervations upon two or three *Metals*, I might run through the reſt, but that were to make a *Book* of a *Preface*.

I might alſo adde, that it is thought by *Paracelſus*, that *Moſes* in writing the *Hiſtory* of the *Creation* did myſtically teach the whole progreſs of the *Metallick Art*, and that *Meyerus* teacheth this Art alſo by the uſe of *Muſick*: But theſe and many other *ſpeculations* I wave, for my intentions are rather to inſtruct others in the *practicall* Part, then amuſe them with the *Theory*; therefore that they may be the better guided, give me leave to recommend the 33. and 34. *Books* of *Pliny's Natural Hiſtory* of *Metals*, and next *Georgius Agricola*, for the ways of finding out *Metals*, *digging* and *ordering* them together, with the deſcription of the *Engines* and *Tools* requiſite for that work.

Then *Lazarus Eſeberus*, which by order of the *Societies* is tranſlated out of *High Dutch*, and this teaches the perfect way of *Melting*, *Fining*, and *refining Metals*, the manner of making *Furnaces*, *Teſts*, and *Inſtruments* fit for ſuch *operations*; and if thou deſireſt to dive into the ſecrets of the *Philoſophers ſtone*, let me recommend to you the ſecond part of *Joannes Spagnetus*, who layes the moſt plauſible *Maximes* for it, of any that I meet with, and for the *practicall* part of this, I refer thee to *Baſilius Valentinus*: And for the clearer underſtanding of theſe *Authors*, I ſhall ſhortly preſent you with

a *Di-*

a *Dictionary* of such words as concern the *Metallick* and *Chemick Arts* with their *Interpretations*; a *Specimen* whereof is at the end of the Book. And now, Kind *Reader*, as thou likest this thou mayest proceed.

FODINÆ

A DISCOURSE OF THE HISTORY AND LAWS Of the *MINES and MINERALS* Within *England*, *Wales*, and the Englisſh Pale of *Ireland*.

CHAP. I.

What a Mine is.

A *MINE* is defined to be a certain *Foramen*, *Hole*, *Hollow place*, or Paſſage digged in the Earth, from whence *Metals* or *Minerals* are by labour raiſed: for if common *Stones* onely are found (as *Marble*, *Touchſtone*, *Freeſtone*, &c.) we call them *Quarries*, and not Mines. And where *Clays* are digged (as *Fullers earth*, *Potters earth*, &c.) we call them *Pits*. *Libavius* terms it the Womb, or Natures place of *Metals*. *Mine.* *Quarries.* *Pits.*

Chap. II.

The Names of thoſe holes which concern Metals.

Shaft or Puteus.

THeſe are either called *Shafts* or *Adits*. The *Shaft* is that which is digged round or ſquare, like a Well, from which the Earth that is digged is wound up in Baſkets by Ropes, as we do Buckets of water; and theſe are not onely for that uſe, but likewiſe to give air to the Mine. And ofttimes Pumps are put into theſe *Shafts*, to fetch out the water; for theſe *Shafts* are in many places 40, 50, or 60 fathom deep before the Miners come to the *Metal* or *Miner*[illegible] for which they dig.

Adit or Cuniculus.

Now the *Adit* is from the Latine word *Aditus*, that is to ſay, an *entry*, *paſſage*, or *approach* to a thing. And this is uſually made on the ſide of the Hill, but towards the bottom, about 4, 5, or 6 feet high, and 8 feet wide, in the nature of an Arch, ſometimes cut in the rock, and ſometimes ſupported with timber; ſo that the ſole or bottom of this *Adit* may anſwer the bottom of the *Shaft*, but ſomewhat lower, ſo as the water may have a ſufficient Current to paſs away, which is exactly known by the ordinary ways of *Dialing*, or the Workmans keeping the water at his foot while there is any: and he is directed toward the Shaft by a Needle touch'd with a *Loadſtone*, the uſing whereof is called *Dialling*: and by this and other Arts the water is conveyed away with more eaſe and leſs charge then by *Pumps*. And when the Miners by theſe Shafts or Adits do ſtrike or threed a *Vein* of any *Metal* (for *Metals* under the Earth are diſperſed like *Veins* in our bodies, and therefore called *Veins*) then the *Metal* which is digged from thoſe *Veins* is called *Oar*, as *Silver oar*, *Lead oar*, &c. And by theſe *Adits* the *Fumes*, *Damps*, and unwholeſome Vapours, are better diſperſed, which otherwiſe might endanger the *Miners*; but if any of them

Dialling.

Oar.

Damps.

them be ſurpriſed with ſuch a *Damp*, ſo as for the preſent he may be deprived of his ſenſes, he is drawen up out of the *Mine*, and they dig a little hole in the earth, and lay him on his belly, with his mouth to the freſh Earth of that hole, which ſpeedily recovereth him. *Againſt Damps.*

CHAP. III.

The ſeveral Metals for which we dig.

THey are *Gold*, *Silver*, *Tin*, *Copper*, *Lead*, *Iron* and *Quick-ſilver*; and theſe are often found lying upon the cliffs or chincks of Rocks, known by their *colour*, *brightneſs*, or other marks; or by ſuch other *Minerals* as the Workmen call *Leaders*, becauſe they uſually accompany the *Metallick oar*, and lead to it. Or they are diſcovered to us either by the nature of *Plants* which grow over them, by the *Plough*, by *Moles* which caſt up their *ſhade* or glittering earth; (and therefore in *Derby-ſhire* and other places where *Lead* abounds, they rarely kill them) or by Springs and Streams of water, or by the uſe of an Hazel ſtick (if credit may be given to it:) But by ſome or one of theſe the *Miners* are encouraged and directed to dig. As for *Gold* and *Silver*, which are the nobler and richer *Metals*, we have not yet diſcovered any Mines which yield perfect *Gold* or *Silver oar* (as in *America* and other hotter Climats, although we are not altogether out of hopes of very rich ones in *England* and *Wales*) but our former and later Ages here have and yet do get Gold and Silver meerly by *Extraction*, or melting thoſe baſer hard Metals, ſo as by art of the Refiner the *Gold* or *Silver* is ſeparated from them. *Metals.* *The ways of diſcovering them.*

Now the *Oars* which this Kingdom affords are onely *Tin*, *Copper oar*, *Lead oar*, *Iron oar* and *Cadmine oar* (which ſome call *Callamine*) of which *Braſs* is made with a mixture of Copper. And theſe Oars being digged, the

the Miners bring them (being firſt beaten ſmall and waſhed) to certain *Furnaces* and *Mills* prepared for that purpoſe.

Where, when they are *ſmelted* and caſt into a ſolid form, if *Lead*, they call them *Pigs*; if *Tin*, *Blocks*; if *Iron*, *Bars*; if *Silver* or *Gold*, *Cakes*; if *Copper*, *Roſe-cakes*. And being thus formed, the *Tin oar* is called *Tin*, the *Copper oar*, *Copper*; the *Lead oar*, *Lead*; the *Iron oar*, *Iron*; the *Cadmine* and *Copper oar* united is called *Braſs*: and this being once more *melted* (which melting is called *Refining*) if they yield Gold or Silver in any advantageous quantity, the *Mine* and *Oar* are entituled accordingly.

Chap. IV.

Of thoſe Metals as they are mix'd.

As it is queſtionable whether there be any Element pure; ſo it may be doubted, whether there be any *Metal* without a mixture of other *Metals*. For in hot Countries, where *Gold* and *Silver* are ſo pregnant, that both for bulk and value they give the denomination of a *Gold* or *Silver Mine*; yet even from theſe *Lead* or *Copper*, &c. may be extracted in ſome ſmall proportion: ſo with us, though the bulk be *Tin*, *Copper*, *Lead*, *Iron*, *Cadmine*, &c. yet even from the worſt of them ſome *Gold* and *Silver* may alſo be extracted; and moſtly ſo much, as that the value of that little which is extracted, may be much greater then that of the bulk from whence it had its extraction.

And with the ſeveral mixtures of theſe ſeveral *Metals* other Forms are produced; as *Tin* and *Lead* make *Pewter*, *Tin* and *Braſs* make *Alchymy*, *Copper* and *Cadmine* make *Braſs*. And ſometimes *Steel* is found perfect through natural hardneſs, but *Iron* and *Tin* make it by art. *Tin*, *Lead*, *Braſs* and *Copper* make that *tunable metal* from

from which our *Bells* are founded, and the artificial mixture of these ~~five~~ *Metals* may afford as many varieties as those do *Changes*

CHAP. V.

Of Minerals and other Products or Juices, how beneficial to the Kingdom.

THe chief are *Sulphur, common Salt, Saltpeter, Nitre,* *Minerals.* *Allum, Vitriol, Copperice, Copperice ſtone, Armoniack, Arſnick, Sanderick, Cinoper, Vermillion, Stibium, Antimony, Zink, Black Lead,* and many more; *Red* and *Yellow Oker,* and *Coals* of ſeveral ſorts.

And from the Metals are produced *Letharges,* according to the Metals; *White Lead, Red Lead, Potters Lead,* and many other varieties.

And in theſe *Veins* of *Metals* and *Minerals* are often found *Loadſtones, Amathiſts, Aſtrolites, Rough pearl* and *Soft diamond*; and ſeveral other excellent things, which are accounted as *Treaſures.*

Beſides the enjoyment of the *Metals* and *Minerals* digged from the Earth, the benefit to the *Nation* is great; for in the *Book of Rates* we ſhall find above two hundred particulars of ingrowen *Metals* and *Minerals,* which do afford great *Cuſtoms* to the *Crown,* and would do much more, if the management from their *original vent* were duly inſpected.

Then for the *Phyſicians* and *Chymiſts* (though *Galeniſts* are not to be ſlighted) we ſee of *Gold* is made *Cordials,* of *Silver Epilepticks*; and *Tin* is uſed for *Cephalaicks, Hiſterick paſſions,* &c.

From *Copper* is extracted *Ens Veneris,* ſo famous againſt *Ulcers,* &c. *Lead* ſanative by *Emplaſtrums, Callamine* and *Braſs* as eminent for the *Eyes, Iron* and *Steel* for the *Spleen* and *Hypocondricks.*

As for *Quick ſilver*, *Sulphur* and *Salt*, they are the *Arcana Chemica*, and ſo are *Vitriol* and *Antimony*, producing Medicines ſcarce credible to any but Experience.

The others do ſervice to the *Diers* and the *Painters*, and ſome of them to the *Female ſex*, as *Ceruſe*, *Vermilion*, &c. giving them Tinctures or Waſhes of *Beauty*. And from the *precious Stones* they have other imbelliſhments.

In ſhort: From theſe *Metals* and *Minerals* digged out of the *Subterranean world*, may be ſtudied the greateſt part of NATURE, all *Arts* imployed, *Labours* encouraged, and the chiefeſt *Sciences* demonſtrated.

CHAP. VI.

The Counties and Shires in England and Wales where theſe are found.

THeſe *Metals* and *Minerals* are moſtly produced from the Hilly and Mountainous parts of *England* and *Wales*. For *Norfolk*, *Suffolk*, *Cambridgeſhire*, *Eſſex*, *Iſle of Ely*, and other flat and almoſt level Countries or places, do not afford them, nor are apt to breed them; or if they did, yet it would not quit coſt to dig for them, becauſe the charge of exhauſting the water by *pumps* (which muſt inevitably be) would prove greater then any expectable gains: whereas in *mountains* and *hilly* places the Waters and *Oars* may be carried off by *Adits*; which though made with hard labour, yet with leſs charge and more certaintie.

The beſt *Tin Mines* yet known are in *Cornwall* and *Pembrokeſhire*.

Tin, Copper, Gold and Silver.

Copper Mines containing ſome Gold and Silver are in *Cornwall*, *Devonſhire*, *Somerſetſhire*, *Glouceſterſhire*, *Derbyſhire*, *Shropſhire*, *Cheſhire*, *Northumberland*, *Cumberland*, *Pembrokeſhire*; and we doubt not of good in *Kent*.

The

The beſt *Lead oar* containing Silver are in *Devonſhire*, *Glouceſterſhire*, *Worceſterſhire*, *Staffordſhire*, *Leiceſterſhire*, *Cheſhire*, *Derbyſhire*, *Lancaſhire*, *Cumberland*, *Northumberland*, *Yorkſhire*, *Biſhoprick of Durham*, *Flintſhire*, *Denbyſhire*, *Shropſhire*, *Carnarvanſhire*, *Merioneth*, *Montgomery*, *Caermarthen*, *Brecknock*, *Monmouth*, *Buckinghamſhire*, *Dorſetſhire*, and (in the time of *Henry* the Fourth) one in *Eſſex*. *Lead and Silver.*

Iron oar is plentiful in *Cornwall*, *Shropſhire*, *Staffordſhire*, *Glouceſterſhire* and *Suſſex*, &c. *Iron.*

Cadmian oar, or *Lapis Calaminaris*, in *Glouceſterſhire*, *Somerſetſhire*, *Cornwall* and *Nottinghamſhire*. *Cadmian.*

Quickſilver is found in many Veins where the *Lead* lies, and in theſe places are alſo found the *Minerals* beforementioned. *Quickſilver.*

Allom more particularly is found in *Yorkſhire* and *Pembrokeſhire*. *Allom.*

Note that *Allom* digg'd is accounted a *Metal*, but *Allom* made of water not ſo.

Copperice is in the Copper Mines. *Copperice.*

Copperice ſtones are thrown up by the Sea between *Quinborough* and *Gillingham* in *Kent*, &c. *Copperice ſtones.*

Sanderick, *Cinoper*, *Stibium*, *Antimony* and *Black Lead* are in moſt of thoſe places where *Lead* is diſcovered, but the beſt *Black Lead* particularly in *Cumberland*. *Sanderick*, *Cinoper*, *Stibium*, *Antimony*, *Black Lead.*

Red Oker in *Warwickſhire*, *Suſſex* and *Somerſetſhire*. *Red Oker.*

Yellow Oker in *Oxfordſhire*, &c. *Yellow Oker.*

White Lead and *Red Lead* are made of *common Lead*, and *Potters Lead* is made by art from *common Lead oar*. *White Lead.* *Red Lead.* *Potters Lead.*

Salts in *Cheſhire* and *Worceſterſhire* in Stones and Springs, and ſome is made by *art* from Salt water on the Sea-coaſts, and at *Exmouth* in *Devonſhire*, and in other marbly Shores, at a low water it ſhews it ſelf upon the Sand for many miles by calefaction of the Sun. *Salt.*

The Pariſhes and Villages where the *Mines* lie not, are under the Societies care, and here omitted, being entered upon continued Diſcoveries in their Leiger books.

Of

Of The IRISH MINES.

As for those *Mines* within the *English Pale* of *Ireland*, granted to the *Society* by Queen *Elizabeth*; it is fit that the Circuit of that *Pale* should be known, before the particular places of these *Mines* be set down.

The *Irish* do acknowledge that the *English Pale* is all the Countie of *Dublin*, *Kildare*, *Carlough* alias *Caterlough*, in the Province of *Lemister*, and all the Province of *Meth*, as it is divided into three parts, viz. *East Meth*, *West Meth*, and *Long ford*; and this Circuit is called the *English Pale*, because those Territories were always inhabited by the *English*, nor could they be dispossessed notwithstanding the often incursions of the *Irish*, so that their safe guarding of that Circuit of ground from the *Irish* was (as it were) a *Pale* to the *English*, and therefore called the *English Pale*.

But when the *Society* shall think it useful to make a further inquirie into the Latitude of their Grant from the Crown, they will find all *Lemister*, *Ulster*, and part of *Munster* to be also included: but in so much ground as is confessed by the *Irish* to be within the *Pale*, and anciently appertaining to the *English*, there are store of *Lead Mines* affording good quantitie of Silver; also *Copper Mines* and *Iron Mines*, and other Metals and Minerals, which may prove a reward to Industrie, and to the further Inquiries of the *Society*.

CHAP. VII.

The usual Definition of the Poor Mines *and* Rich Mines *or* Mines Royal.

WHere the *Oar* which is digged from any *Mine* doth not yield, according to the Rules of Art, so much *Gold* or *Silver*, as that the value thereof doth exceed the charge of *Refining*, and loss of the baser *Metal* wherein it is contained, or from whence it is extracted, then it is called *poor Oar* or a *poor Mine*. *Poor Mine.*

On the contrary; where the *Oar* digged from any *Mine* doth yield according to the Rules of Art so much *Gold* or *Silver*, as that the value thereof exceed the charges of *Refining*, and loss of the baser *Metal* in which it is contained, and from whence it is extracted, then it is called *rich Oar* or a *Mine Royal*; 'tis appertaining to the KING by his *Prerogative*. And herein consists the skill and honestie of the Refiner; for some have made very great Products from that very *Oar*, from which less skilful *Essayers* could extract nothing. *Mine Royal.*

CHAP. VIII.

The way of Computing this by the Art *of* Extraction.

	l.	s.	d.
TWo Tun and a quarter of *Oar* make a Tun of *Metal* at a medium rate 3 l. 10 s. which is	07	17	06
Carriage to the *Mills* at 6 s. 8 d. per Tun	00	15	00
Sives, Tubs and *Oar bags* at 2 s. is	00	04	00
So that the Charge of the *Oar* deducted at the *Mills* which makes a Tun *Metal* costs	08	17	02

Charge of *Smelting* per Tun.

	l.	s.	d.
2 doz. *White Coal* at 8 s. per doz.	00	16	00
5 barrels *Black Coal* at 2 s. per bar.	00	10	00
Smelting wages per Tun	00	15	04
Stamping and *washing Slags* per Tun	00	05	00
Smiths work per Tun	00	02	04
Rents and Repairs of the *Mills*, *Carpenters* work, Carriages to the Waters side, *Clerks* attendance at the *Mills*, and incident Charges per Tun	00	15	00
Charge of *Refining* per Tun	12	00	10
300. of *Lead* wasted in *Refining* and *Reducing* at 12 s. per Cent.	01	16	00
Refiners wages per Tun	00	05	00
Black coal, *Charcoal*, *Turf*, *Bone-ashes*, *Carpenter* and *Smiths* work, and other incident Charges	01	10	00
	03	11	00
Total Charges	16	11	10
If the said Tun of Metal be made either of *Goginian*, *Coomervin* or the *Darrein oar*, the same yields in *Silver* per Tun of Metal	14	00	00
One Tun of *Lead*, the Waste being deducted, as aforesaid, is	12	00	00
	26	00	00
The Charge in all is	16	11	10
Deducted out of 26 l. the clear profit of a Tun of *Lead* is	09	08	02

If the said Tun of *Metal* be made of the Oar of *Coomsumblock*, it yields 20 l. per Tun in *Silver*.

This

This is only to ſhew the manner of computing a *Mine Royal* by Art; but ſome are of opinion, that all *Metals* do contain *Gold* or *Silver* in them, and that therefore all *Veins* of *Metals* do belong to the *King*.

But for the Readers ſatisfaction as to matter of Law in that point, he is referred to the Second Part of this Treatiſe.

And thus having briefly deſcribed *Mines*, *Metals*, *Minerals*, their *places* and *definitions*; the next is to ſhew what *Governours* or *Officers* the *Kings* of *England* have from time to time deputed, and what Directions and Powers have been granted for their better *Regulation*.

CHAP. IX.

Of the Antiquitie *of the* Mines Royal.

THeſe Works in *Wales*, with ſome other in *Devonſhire*, *Somerſetſhire* and *Cornwall*, as far as Tradition can aſſure us, were anciently wrought by the *Romans*. By the *Damonii* in *Devonſhire* and *Cornwall*, by the *Belgæ* in *Somerſetſhire*, and by the *Dimetæ* in *Cardiganſhire*. And *Cæſar* in his Commentaries ſaith, that one reaſon of his invading the *Britans*, was becauſe they aſſiſted the *Gauls* with their *Treaſures*, with which their Countrie did abound.

And *Cimbeline* Prince of the *Trinobantes* (wherein *Eſſex* is included) who had lived much at *Rome* in *Auguſtus* his time, was ſeated at *Walden* in that Countie, and did (according to the *Roman* way) coin Monie inſtead of Rings, which might be from that *Mine*, which was afterward diſcovered in *Hen.* VI. his time in that Countie, (as yet unknown to the Societie.) However 'tis certain there were *Mines*, which did ſupply former Ages, and may be again uſed with very great advantage to this preſent Age.

As

As for the Laws made by the *Romans* concerning *Mines*, the moſt material of them are abridged, and annexed in their genuine Language, that others may make their own Interpretations.

Moſt of which Laws are agreeable to the Grants and Powers of our ſucceeding *Kings*; onely as to the Condemning ſuch Men and Women to the *Mines*, who had committed ſome heinous Crime againſt the *Laws* of the *Empire*, our *Kings* have been more merciful therein, though that point were in this Age worthy of conſideration, in reſpect of the yearly multitudes of able ingenious perſons, that ſuffer death by the *Laws*, whoſe *Lives* upon this Imployment might be very uſeful.

CHAP. X.

Of the Powers granted by our Kings *concerning the* Mines.

EDWARD I. *Anno* 33.

Cornwall. THe *King* for advancement of the *Stannaries* in *Cornwall* frees the *Tinners* from all *pleas* of the Natives touching the Court, and from anſwering before any Juſtices, &c. concerning the *Stannaries*, ſave onely the Keeper of the *Stannaries*, (Pleas of *Land*, *Life* and *Member* excepted) neither are they to be kept from work but by the ſaid Keeper, and indemnifies them from *Tolls*, &c. gives them libertie to dig *Tin* and *Turf* any where in the ſaid Countie, and to turn *Water-courſes* for their Works at pleaſure: with many other Privileges both to the *Keeper* and *Tinners* concerning weighing and ſelling their *Tin*.

Tinners.

CHAP.

CHAP. XI.

EDWARD III.

KIng *Eward* III. by Indenture dated 11 *July*, *Anno* 32. *Reg.* 4. grants unto *John Ballantet* and *Walter Bolbolter* all his *Mines* of *Gold*, *Silver* and *Copper* in the Countie of *Devon* for two years, with libertie to *dig* and *search*; (except in Gardens yielding 20 *marks* the first year, and the 5th. part the second year) and all other persons are excluded from digging there. *Devon.*

EDWARD III.

Among the Remembrances of the *Exchequer*, the *King* to *John Jugg* and *Henry* of *Wisbich*; Whereas We are informed, that certain *Mines* of *Lead* mixt with *Gold* and *Lead* Oar are found in the Countie of *Salop*, He wills that the *Barons* of the *Exchequer* and *Treasurer* may be certified of the manner of finding the said *Mines*, and whether any hath been *transported*, and by whom; and impowers them to inquire upon *oath*, and commands them to certifie His *Treasurer* and *Barons* thereof at, &c. so that further Order may be taken, and to return the *Inquisition*, &c. *Salop.* *Gold and lead Oar mixt.*

Witness Our *Treasurer*, 30 *Octob. Anno* 7.

CHAP. XII.

RICHARD II.

Devon. Gold and Silver.

KIng *Richard* II. by his *Letters Patents* dated 11 *Junii*, *Anno* 8. grants to *Richard Wake* Clerk, his *Mines* of *Gold* and *Silver* in the Countie of *Devon*, and libertie to *dig* (paying *damage* to the Owners of the Grounds) as well within Liberties as without, for ten years, paying a *tenth* part of the profit unto the *Holy Church*, and to the *Exchequer* the nineth part, and all other persons to be excluded, *prout ante.*

RICHARD II.

Salop.

The *King* to *Hugh* of *Burnell*, and our *Sheriff* of *Salop*; Whereas We are informed by *James Miner* of a *Mine* of *Copper* and *Silver* in or near the Lordship or Priory of *Wenlock*, whereout no little profit would accrue to Us, if wrought by experienced Workmen; We assign you to ordain the said *James* to work the same without any let, he not doing any thing against the *Laws* of our Kingdom, or demolishing any *Houses* or *Gardens*, &c.

Witness the *King* at *Westminster*, 4 *Junii*, *Anno* 17. *Regni*, Rot. 12.

CHAP.

CHAP. XIII.

HENRY IV.

KIng *Henry* IV. by his Letter of *Mandamus*, *dat.* 11. *Maii*, *Anno* 2. *Rot.* 34. commands *Walter Fitz-Walter* (upon Information of a Concealed *Mine* of *Gold*) to apprehend all ſuch perſons as he in his judgment thinks fit, that do conceal the ſaid *Mine*, and to bring them before the *King* and his Council, there to receive what ſhall be thought fit to be ordered. *Eſſex. Gold.*

HENRY IV.

The *King* to *William Charleton*, Prior of *Pilton*; Whereas we have granted to *Henry* and *John Darby* the *Lead Mines* holding *Silver*, *in Com. Devon.* for ten years, paying Us nine pounds of *pure Silver* yearly, and to Us and others all other dues, We make you *Comptroller* thereof, and command your diligence therein during pleaſure. *Devon. Holding Silver.*

Dat. 9 *Feb. Anno* 7. *Regni*, *Rot.* 20.

CHAP. XIV.

HENRY VI.

THe *King* by His *Letters Patents*, *dat.* 24 *Feb. Anno* 5. grants to *John Duke* of *Bedford*, *Regent* of *France*, and *Protector* of *England*, all *Mines* of *Gold* and *Silver* within His Kingdom of *England*, for 10 years, paying the *tenth* part to the *Holy Church*, to the *King* the 15*th.* and to the *Lord of the Soil* the *twentieth* part, to dig, &c. but not under Houſes, in Arable Land or Medow, without Licence of the *Lord of the Soil*, and to make reaſonable *amends* for any damage. *England. Gold and Silver.*

HENRY

HENRY VI.

Deven. and Cornwall. Gold, Silver and Lead.

The *King* by his Letters Patents granted to *John Sollers* all *Mines* of *Gold* and *Silver* in *Deven* and *Cornwall*, and all *Mines* of *Lead* holding *Silver* or *Gold*; to hold (from the expiration of 12 years formerly granted to the *Duke of Bedford*) for 20 years, paying the fifteenth part of pure Gold and pure Silver; with libertie to dig and work the ſame, but not to dig under any Houſes or Caſtles, and a Clauſe to provide for *Wood* and *Labourers*.

Dat. 11 *Julii*, *Anno* 17. *Hen.* VI. *Rot.* 45.

HENRY VI.

Deven and Cornwall. Gold, Silver, Copper, Latten, and Lead.

The *King* by his Letters Patents makes his Chaplain *John Bottwright* Comptroller of all his *Mines* of *Gold* and *Silver*, *Copper*, *Latten*, and *Copper Latten Lead*, within theſe two Counties.

Dat. 10 *Sept.* *Anno* 30. *Hen.* VI. *Rot.* 15. & 20.

HENRY VI.

Deven and Cornwall, Copper, Tyn and Lead.

The *King* by His Letters Patents granted to the ſaid *Bottwright* Provoſt and Governour of all his *Mines*, *prout ante*; and grants him all *Mines* of *Copper*, *Tin* and *Lead*, there whereout any *Gold* or *Silver* ſhall be fined; to hold during his good behaviour, paying the tenth part of pure *Gold* and *Silver*, *Copper*, *Tin* and *Lead*, to be fined at his own charge; with power to let and ſet for twelve years, paying to the *King* the tenth *Boule* of Oar, of *Copper*, *Tin* and *Lead* holding Gold or Silver; and to *dig* without interruption, with a Clauſe to make a Proviſion for *Wood* and *Labourers*, the Fee of the *Church* excepted.

Dat. 20 *Junii*, *Anno* 31. *Hen.* VI. *Rot.* 20. & 25.

HENRY

HENRY VI.

The *King* by His Letters Patents *Anno* 34. Rot. 24. gives and grants to the *Duke of York* all his Mines of *Gold* and *Silver*, and of all other *Metals* containing *Gold* or *Silver*, within the Counties of *Devon* and *Cornwall*; to hold at the pleasure of the *King* for 21 years, with a Clause not to dig under the Houses or Medows of any person, and with a Clause to free and indemnifie the *Miners*, without impediment of the *King* or his Subjects, wheresoever the said *Mines* shall be found within the said Counties. *Devon and Cornewal. Gold, Silver, and all Metals containing Gold or Silver.*

HENRY VI.

Among the Remembrances of the *Exchequer*, *Anno* 36. *Regni*, in the Records of Easter Term Rot. 20. *inter alia*: *Devon.* Memorand. That *John Bottwright*, Governour of the *Mines* of *Berryferres* in *Devon*, complains to this *Court*, that *Robert Glover* at the command of *Roger Champernown* took away 144 Bouls of *Glance oar*, valued at 15 l. 6 s. 8 d. and made profit of the same without any thing allowed to the *King*, to the *Kings* damage 100 l. and thereupon desireth the Advice of the *Court*. *Devon.* *Mines.* *Glance oar.*

CHAP. XV.

EDWARD IV.

England. Lead holding Gold or Silver.

THe *King* by his Letters *Pattents*, *dat. Dec.* 20. *Anno* 8. *Regni* to *Richard* Earl of *Warwick*, *John* Earl of *Northumberland*, and others, grants all *Mines* of *Gold* and *Silver*, &c. on the *North ſide* of *Trent* within *England*. And all *Mines* of *Lead* holding *Gold* or *Silver* in the parts aforeſaid (agreeing with the *Owners* of the ſoyle) to hold from the Feaſt of the *Purification* next, for 40 years, paying to the King the 12. part of pure *gold* and *ſilver*, and to the Lord of the *ſoyle* a ſixteenth part as they grow, liberty to dig, &c. except under *Houſes* or *Caſtles* without Licence.

EDWARD IV.

Somerſet & Glou ceſt. Lead, Tin and Copper holding Silver.

The *King* by his Letters Pattents 30 *Julii Anno* 12. *Rot.* 2. grants to *Gallias Lynne*, *William Marriner*, and *Simon Pert*, power to *dig* and *ſearch* for *Mines*, within the Counties of *Somerſet* and *Glouceſterſhire*, of *Lead-Oar*, *Tin*, or *Copper*, holding *ſilver* or *gold* for the term of five years, and to agree with the *Lord* of the *ſoyl*, paying to the King every eighth Bowle of *rich Oar*, with a clauſe to make their *Mills* to *Fine* and *Melt*, as the *Owner* and they can agree; And all Officers, &c. to be aſſiſtant.

EDWARD IV.

Northumberland.

Copper.

The King by his Letters *Pattents dat.* 23. *Martii Anno* 15. *Rot.* 20. grants to his brother *Richard Duke of Glouceſter*, *Henry Earle of Northumberland*, and others, the *Mines* of *Blanch Lands* called *Shildane* in *Com. Northumb.* And the *Mine* of *Alſton-Moor* called *Fetchers*. The *Mine* of *Keswick*

Keſwick in *Cumberland*, and the *Copper Myne* neer *Richmond* in *Yorkſhire*; To hold from Lady day next, for 15 years, Paying the *King* the eighth part *neat*, to the Lord of the *Soil* the ninth, and to the *Curat* of the place a tenth, as they ariſe.

EDWARD IV.

The *King* by his Letters *Patents Dat.* 11 *Martii*, *Anno* 18 *Rot.* 31. Upon ſurrenders of the former grants to *William Goderſwick* and *Doderick Vaverſwick*, all *Mines* of Gold, Silver, *Copper* and *Lead* in *Northumberland* and *Weſtmerland*, To hold from Lady day next, for ten years, paying to the *King* a fifteenth part neat, to the Lord of the *Soil*, and to the *Curat* as they can agree. *Northumberland. Gold, Silver, Copper, Lead.*

CHAP. XVI.

HENRY the VII.

THe *King* by His *Letters Patents*, *dat.* 27 *Feb. Anno* 1. *Regni*, *Rot.* 92 makes *Jaſper Duke* of *Bedford*, and others *Earls*, *Lords* and *Knights*, *Commiſſioners* and *Governours* of all his *Mines* of *Gold*, *Silver*, *Tin*, *Lead* and *Copper* in *England* and *Wales*, to anſwer the profits to the *King*, and made Sir. *William Taylor Comptroller*, To hold from Candlemaſs day following, for 20 years, with Liberties of *Court* and other Priviledges, Paying to the *King* the fifteenth part of *pure Gold* and *Silver*, and to the Lord of the *Soil* the eleventh part, as it grows, Liberty to dig and ſearch, &c. Except under the Houſes and Caſtles of the *King* and his *Subjects*. *England & Wales. Gold, Silver Tyn, Lead and Copper.*

This *Henry* VII. (a wiſe Prince) taking notice of his intereſt and Prerogative in the *Mines*, did in the very firſt year of his Reign grant this *Commiſſion*, and by this and

other ways raiſed a vaſt ſum of Mony, and left his rich Coffers to *Henry* VIII. Who added to the Bulk by the Sale of *Abbies*, &c. But before *Henry* VIII. his death, almoſt all the Treaſures of his Fathers and his own were conſumed, and what remained was left to *Edward* the VI. an Infant, whoſe experience could not guide him to the Care of ſuch affairs: then followed *Queen Mary*, who matching with *Spain*, was thereby intereſſed in the wealth of *Europe*, and needed no other ſupport or inſpection; ſo this concern ſtood neglected for above 70 years.

Chap. XVII.

Queen Elizabeth.

About the third year of *Queen Elizabeth*, ſhe, by the advice of her Council ſent over for ſome *Germans* experienced in *Mines*, and being ſupplied, ſhe, the tenth of *October*, in the ſixth of her reign, grants the *Mines* of eight Counties, beſides thoſe in *Wales*, to *Houghſetter* a *German*, &c. whoſe name and Family ſtill continue in *Cardiganſhire*; and doubtleſs we had much of our knowledge from their Predeceſſors, who revived this work in *Cardiganſhire*. They alſo entered upon another work of *Copper* at *Keſwick* in *Cumberland*, being within the Royalties of the Earl of *Northumberland* formerly granted to him from the Crown, together with all *Mines*, &c. Whereupon the Earl oppoſed *Houghſetter*, but the matter being brought to Tryal between the *Queen* and the *Earl*, it was the opinion of the Judges, that notwithſtanding his Grant the *Queen* had power to ſearch for *Treaſure* in any ones ground. So that it is good for *Princes*, and even for mean *Lords*, to keep a Claim to their *Prerogatives* and *Cuſtomes*, leſt time, as in this caſe, ſhould cauſe an oppoſition. For 70 years *intermiſſion* made that queſtionable, which for many ages before was out of queſtion. But this

this Suit being ended, (the Abſtract of which Proceedings is hereto annexed) to prevent the like occaſion for the future, the *Queen* (*May* 28. in the 10th. year of her Reign) erects a *Corporation*, of which *William* Earl of *Pembroke* was the firſt *Governour*, and *Robert* Earl of *Leiceſter*, *James* Lord *Monjoy*, Sir *William Cecill* Aſſiſtants, and many other Perſons of Qualitie joyned, conſiſting in all of 24 *Perſons* and as many *Shares*, and thoſe *Shares* ſubdividable into half and quarter parts, ſo that they might conſiſt of 96 Perſons, their Votes being according to the proportion they had of Shares.

And this *Society* was and is entituled *The Society for the Mines Royal*; and they have the Grant and care of *Gold*, *Silver*, *Copper*, &c. within 8 *Engliſh Counties* hereafter recited, and of all *Wales*.

As for the *Laws* and *Rules* by which they were managed, they are alſo annexed.

Theſe Perſons thus incorporated by a joynt Stock wrought ſeveral Mines with good ſucceſs.

The *Queen* did alſo in the 7th. year of her Reign grant to *William Humfreys* and *Chriſtopher Shuten* German, all *Mines*, *Minerals*, and *Subterranean Treaſures*, (except *Copperice* and *Allom*) which ſhould be found in all other parts of *England*, (not mentioned in the former Patent) or within the *Engliſh pale* in *Ireland*, by the name of *Gold*, *Silver*, *Copper*, *Tin*, *Lead*, *Quickſilver*, *Cadmian* Oar, or *Lapis Calaminaris*, and all manner of *Ewres* or *Oars*, *ſimple* or *pure*, *mixt* or *compounded*, for *Latten*, *Wire* or *Steel*, &c.

And alſo on the ſame 28th. of *May* in the 10th. of her Reign, the *Queen* frames the Participants into a *Corporation*, by the name of *The Society for the Minerals and Battery works*. As for their Laws and Rules they are alſo annexed with the other.

This alſo was look'd upon as ſo conſiderable a matter to the *Crown*, that Sir *Nicholas Bacon* then Lord Keeper, the *Duke of Norfolk*, *William* Earl of *Pembroke*, *Robert* Earl of *Leiceſter*, *William* Lord *Cobham*, Sir *William Cecill*,

Sir *Walter Myldmay*, Sir *Henry Sidney*, Sir *Francis Jepſon*, Sir *William Gerard*, with 29 more conſiderable Perſons, *Gentlemen*, *Lawyers*, *Citizens* and *Foreiners*, were Participants. And this *Society* conſiſted of 36 *Shares*, ſubdividable alſo into half and quarter parts; ſo that it was capable of 144 *Shares*. And this alſo by a *joynt Stock* did effect great things, which turned to good advantage both to the *King* and to the *Society*.

THE ARMS OF THE SOCIETY OF THE MINES ROYAL,

Given Aug. 26, 1568. *Anno* 10. *Eliz.*

This Coat is blazoned in Page 24. and the other Coat in Page 23. above it.

As they are Blazon'd.

Silver *with a* Mount Vert. *A* Man *working within a* Mine, *with two* Hammers *and a* Lamp, *all in their proper* colours *on a* Chief Azure. *A* Cake of Copper *between a* Bezant *and a* Plate *on a* Wreath Silver *and* Azure. *A* Demy man (*called in Dutch the* Schicht Maſter) *with an* Eſcocheon *on his Breaſt* Or *and* Azure per Bend inverted; *in one of his Hands an Inſtrument called a* Wedge, *and in the other Hand a* Compaſs, Gold mantled, Silver doubled Azure, ſupported *with two Men, the one called the* Hammer-man, *with a* Hammer *on his Shoulder; and the other the* Smelter, *with a* Fork *in his Hand; all in proper* colours.

THE ARMS OF THE SOCIETY FOR THE MINERAL AND BATTERY WORKS,

Given alſo Anno 10. *Eliz.*

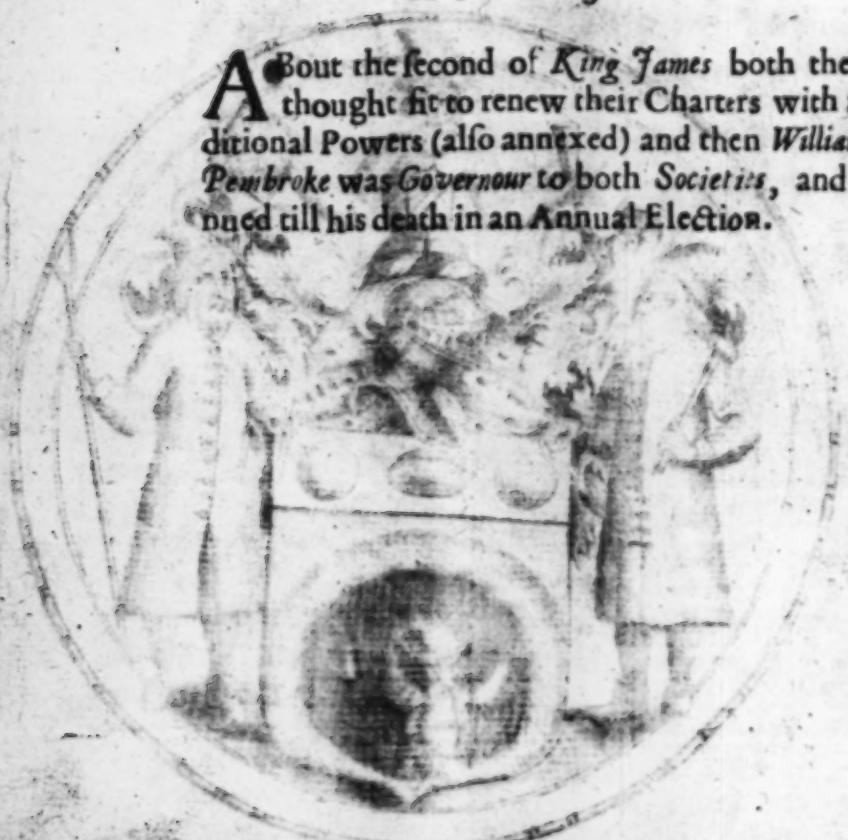
As they are Blazon'd.

The Field Azure *upon the* Base point Vert, *a* Dorick Argent, *supported by a* Lion *and a* Gryffon armed *and* languid Gules. *On the top of the* Pillar *a* Ducal Crown Or. *On the* Chief *an* Annulet Argent *between two* Bezants *of the same. The* Crest *on an* Helmet *and* Wreath Argent *and* Vert. *Two* naked Arms *and* Hands *supporting a* Cake of Copper proper; *the* Supporters *an ancient* Man *in a Gown wearing an* Headpiece, *on it a* Cressent, *and holding one hand on the* Escocheon, *in the other a* Pickax: *on the other side a* Woman, *holding also the* Escocheon *with one hand, and in the other a* Quadrant.

CHAP. XVIII.

KING JAMES.

ABout the second of *King James* both the *Societies* thought fit to renew their Charters with some Additional Powers (also annexed) and then *William* Earl of *Pembroke* was *Governour* to both *Societies*, and so continued till his death in an Annual Election.



CHAP.

CHAP. XIX.

CHARLES I.

AFter the death of *William* Earl of *Pembroke*, in the Year 1630, *Philip* Earl of *Pembroke* was choſen *Governour* of both *Societies*; and in this *Kings* Reign (about the Year 1639) there was ſome Diſpute between Sir *Hugh Middleton* and Sir *Richard Price* concerning the Mines at *Tallabont* in *Wales*, whither Royal or not Royal; and this was alſo about 70 years after the Tryal with the Earl of *Northumberland*: Whereupon ſeveral Eminent *Lawyers* ſubſcribed their Opinions (hereto alſo annexed) and the matter was ſoon quieted. Then from 1641 to 1647 no Governour was choſen, but the *Mines* in *Wales* continued working under Mr. *Thomas Buſhell*, who made them very ſerviceable to the Martial Concerns of the *King* during the Civil Wars.

CHAP. XX.

CHARLES II.

IN the Year 1649 *Philip* dies, then his Son *Philip* (now living) was choſen *Governour* of both Companies, and in 1662 the Lord *Anthony Aſhly-Cooper*, Chancellour of the *Exchequer*, and one of *His Majeſty's* Privy Councellours, was joyned as *Governour* of both Societies with the *Earl*. In 1668 (the Earl of *Pembroke* being willing to quit the Government in reſpect of his retirement) Pr. *Rupert* Duke of *Bavaria* and *Cumberland*, Knight of the Order of the *Garter*, and one of *His Majeſty's* Privy Councellours, was choſen together with the Lord *Aſhly-Cooper* Governour of both Societies, and the Deputy

Governours of both Societies, are now the Lord *Brunker*, Sir *Robert Murray* Knight, Sir *John Pettus* Knight, Sir *Francis Cobb* Knight, Col. *Ashburnam* Cofferer to *His Majesty*, *Thomas Foley* Esquire, *Edward Swith* and *Edward Henshaw* Esquires.

The Assistants to both Societies are Col. *Ashbunham*, *Edward Smith*, *Paul Foley*, *John Darrell*, *John Wright*, *Edward Henshaw*, *Anthony Knightsbridge*, *Dudly Dudly* and *Edward York*, Esquires; *Henry Kemp*, *Thomas Hayes*, *Roger Norton* and *Richard Reynell*, Gentlemen and Citizens.

The *Auditors*, *Treasurers*, *Register* and *Serjeant* are chosen by the *Governours* and *Assistants*, as occasion requires.

There are other *Members* of these *Societies*, of which some do sometimes attend, as the Lord *Byron*, Sir *George Hamilton*, Alderman *Bond*, Mr. *Archold*, Mr. *Palmer*, Mr. *Clutterbuck* and Mr. *Squire*. Others have not attended for many years past, and therefore I shall not mention them.

The usual place of Sitting is at Mr. *Kemps* House in *Sheer-lane*, (who is *Register* to both the *Societies*) where all the Books of the *Records* remain; and either there, or at his Chamber in the *Inner Temple*, all Persons who are desirous to interest themselves in this *Concern*, may receive directions and satisfaction.

CHAP.

CHAP. XXI.

Of other Companies *having like Appellations.*

IN the Year 1662 *His Majeſty* KING CHARLES II. did erect a Corporation, intituling it *The Royal Society for improving Knowledge*; whoſe Studies and Endeavours are to enlighten the World with all *Real Experiments* in Nature, tending to the benefit of Mankind; and of this the Lord *Brunker* is Preſident. *His Majeſty* alſo in the Year 1663 erected another called *The Royal Company*, whoſe buſineſs is to ſettle the *Trade* with *Guiny* in *Africa* concerning *Gold* and *Silver*, &c. whereof *His Highneſs* the DUKE of YORK is Preſident: ſo that there being firſt the *Society of the Mines Royal*, ſecondly the *Society for Mineral Works*, thirdly the *Royal Society*, and fourthly the *Royal Company*; it was thought fit to inſert their Titles here, that thoſe who have occaſion to apply themſelves to either of the ſaid *Societies* or *Companies*, may not be confounded in their Appellations or Applications.

And theſe two Societies of the *Mines Royal* and *Mineral Works* have been ſo prudent, as to make ſeveral of both the other Societies Members alſo of theirs, for the better entercourſe between them in ſuch publick concerns.

CHAP.

Chap. XXI.

Why our Mines, affording Gold or Silver, ſhould properly belong to the King by His Prerogative.

WHere the Supreme Power of *Peace* and *War* is fixed (as with us it is acknowledged in the *King*) he ought to have thoſe Attendances to his Power, which may either continue the one, or ſupport the other. And *Money* (the Product of *Metals*) being the *Ligament* of that, and *Nerve* of this; it is moſt reaſonable, that ſeeing the *Cauſe* is more honoured then the *Effect*, that He whoſe very *Image and Superſcription* makes *Metal* and *Money* paſſable, ſhould in Politicks have the command of thoſe *Mines*, to which after ſome progreſs of *Art* and *Labour*, His mere *Image* gives the *Reputation*; for that which we call *Intrinſick Value*, is ſtill but according to *Extrinſick uſe*. For we find in Hiſtory, that *Copper*, *Ten*, *Lead*, nay even *Leather*, have been in as great eſteem; and at this day *Iron* in ſome Forein parts is more paſſable then *Gold*. So that having the effects of its virtue from our *Cæſars* Superſcription, it is juſt that *Cæſar* ſhould have his due, and all the means and aſſiſtances to attain the Effects thereof. Nor doth it appear by any Record, that this Prerogative was ever oppoſed by any Proprietor: For the Earl of *Northumberland*'s Caſe (hereafter mentioned, and ſet down at large by *Plowden*, concerning the *Copper Mines* at *Keſwick* in that Countie) was onely whether in granting the *Manour* to the *Earl*, together with all Mines within the ſaid *Manour*, the Mines alſo ſhould paſs; and it was reſolved by moſt of the Judges, that though the Grant of the *Manour* was good, yet the King could not alienate *Mines*, being perfectly linked to the Prerogative of the Crown: ſo that this Oppoſition was rather to *explain* his Grant, then to oppoſe the Prerogative. For

the

the *Queens* Deputies workt the ſaid Mine without any further oppoſition of the ſaid *Earl* or his *Succeſſors.*

And ſoon after She fix'd the Conduct of that Affair into a *Corporation*, reſerving to Her Self a *proportion* of what they ſhould get, and a *pre-emption* of what was ſaleable, in caſe She had uſe for it; and leſt the benefit of the *Mines* ſhould exceed the bounds of a Subjects Fortune, She reſerved to Her Self and Her Succeſſors a Power at any time to reaſſume the management of thoſe Affairs to Her Self, paying to the *Corporation* ſuch Compenſation as ſhould be indifferently awarded.

CHAP. XXIII

Why the Government of the Mines was by Queen Elizabeth *committed to the Conduct of Corporations.*

AS it is conceived, the firſt Reaſon of the *Queens* committing them to *Corporations* was, that the *Crowns* Prerogative therein might be permanent; for our *Laws* ſay that *Corporations* never die.

Next, that the *Arts*, *Methods*, *Rules* and *Orders*, by which they were to be conducted, might be regiſtred by them for the uſe of Poſterity, which in former times were but looſe und uncertain, and died with the Undertakers; for no former extant Records do aſſiſt us herein. And this makes other Nations ſo famous, becauſe by way of Corporation they entail their *Arts* and *Manufactures* to their Succeſſors, thinking them no derogation to any of their other Degrees of Honour, to which they have by thoſe *Arts* or otherwiſe atchieved. And the *Romans* were ſo ſtrict herein, that when any *Artificer* died, the Heir of that Artificer was convened before *Judges* about the things of that *Art* which he profeſſed.

The third reaſon was, from Her obſervation of the Inartificialneſs of former Ages in this Concern; which

may be collected from Her sending for and imploying so many *Germans* and others Foreiners, (where *Mines* were plentiful, and the *Arts* belonging to them) who might put us into the tract of managing ours, in *finding* and *digging* them, and in *smelting* and *refining Metals*. And therefore the *Queen* provided in Her *Charter*, that 8 Foreiners might be admitted, and upon such admission of any Foreiner, he was to have *Letters Patents* for his *Indenization* without Fees or Charge; and not onely they, but all persons interessed in these Operations, are to be discharged of all *Fifteenths*, *Tenths*, *Subsidies*, *Taxes*, *Impositions* and *Charges*, except such as are excepted in the Patent, and all *Officers*, *Miners*, &c. to be free from *Juries* and *Arrests*, for which the *Civil Law* (which is the ground of most of our *Laws* concerning *Arts*) gives this reason, because the Charge, Care, Circumspection and Labour (if duly executed) are so great and advantageous to the Publick, that it was thought but reasonable by the *Romans*, and by their example for us, to give them encouragement by such *Concessions*.

And that this Nation was so unknowing in the guidance of this Affair, is evident from the great quantities of *Slags* from *Lead*, and *Cinders* from *Iron*, which by former Ages were thrown aside as of no use, but to mend High ways, or to build with instead of Stone. But of these our present *Artists* do make as great if not greater profit, then of fresh Oars; for which though *Philosophers* give some specious reasons, yet their goodness may rather be imputed to the defect of former skill, in not duly *melting* and *refining* them, then from any improvement of their Nature by so long lying under the Concoction of Heat.

A fourth reason was, that *Arts* and *Sciences* might be improved, and in their very Improvement rewarded; Curiosity being not so prevalent a spur to Knowledge as expectation of Gain. Now of the *Seven Mechanical Arts*, viz. *Agriculture*, *Clothing*, *Navigation*, *Hunting*, *Architecture*,

ſture, *Medicine* and *Martial Diſcipline*; and of the *Seven Liberal Sciences*, viz. *Grammar*, *Logick*, *Rhetorick*, *Aſtrologie*, *Geometrie*, *Arithmetick* and *Muſick*; they who deal in the Conduct of *Mines* muſt be well verſed in at leaſt five of the *Seven Arts*, and four of the *Seven Sciences*. And though the firſt *Incorporations* conſiſted but of 60, yet they had power to take in 240; and really whatever at preſent men may think) that number is ſcarce ſufficient (as may hereafter be ſhewn) to carry on ſo great an Affair.

For it may be confidently affirmed, that as to all *Metals* (except *Gold*, of which we have but a ſmall quantitie) and uſeful *Minerals*, no proportion of Ground in *Europe* affords better of all ſorts (and Quantities enough for our own uſes, and to ſupply others with good advantages) then this Iſland of *Great Britain* and *Ireland*; for though *Scotland* be not under our Conduct, yet it is known that there alſo are good *Mines*.

But the fifth and chief reaſon of thoſe *Incorporations* (as is conceived) was, that they might ſtand as *Mediators* between the ſtrictneſs of the *Kings Prerogative*, and the *Subjects preſuppoſitions* of an *Equitable propriety*. And this was the great Prudence of that *Queen* and Her Council to erect ſuch *Moderators*, leſt (upon miſtake of the Earl of *Northumberlands* Caſe, or other Foundation from the Irreſolution of the three diſſenting *Judges* of the twelve) others might raiſe further Diſputes.

CHAP.

CHAP. XXIV.

The profits and advantages which were made by the first Incorporators, as well to the Crown as to themselves, by the several Mines and Works at first wrought by them, and what those were.

AFter the Suit determined between the *Queen* and the Earl of *Northumberland*, the *Society* did erect several *Mills* and *Works* at *Keswick* in *Cumberl.* under the conduct of *Howcetera German*, where they had plenty of good and rich *Copper oar*, which afforded great profit to themselves and the Nation. But by the death of the first *German Artizans*, and the neglect of a continued *Stock*, and want of *Fuel* in those Parts, and the succeeding Wars, all those *Mills* and *Works* stand ready (though much out of repair) for the Ingenuitie of the present *Incorporators* or others, which in due time may be taken into consideration. And as encouragements it appears by the old Books, that for many years there was very great profit made of them, both Publick and Private: and it may be evidenced that all sorts of *Copper* and *Brass* Manufacture might from thence receive both for *Our selves* and *Forainers*; and these maintained no less then 1000 Artificers and Labourers daily.

Copper Works.

Supplus

Iron Wier Works.

The other great Work was of *Iron* at *Whitbrook* and *Tintorne* in *Munmothshire*, for the working of *Iron Wier* for *Cards* for Woollen Cloth, which is still kept in work by Mr. *Foley*, now *Treasurer* to the Society. This also yielded a great benefit to the Nation, and to the Society; but by reason of the Acts of *Parlement* made against importing of *Forein Wier* are something imperfect, and for other reasons, they afford little: to which also the Society will doubtless have more regard, because it concerneth somewhat the good or ill of the *Clothing Manufacture*, by the ex-

exportation of our *Wier*, and importation of Forein *Wier*; and this Work, and other Iron Works which ſupport them, did alſo imploy at leaſt 4000 Men dailie, and ſo have done for many years by Mr. *Foley*, whoſe Example herein ought to be recorded to Poſteritie for imitation.

There were alſo other excellent Works of *Latten* and *Braſs* Manufactures in *Nottinghamſhire*, conducted by the Lord *John Byron*, and others about *London*; to which was allowed a large Stock, for they ſet on work no leſs then 8000 Men daily, and did produce great advantage to the Crown and themſelves. But theſe *Latten* and *Braſs* Works are decayed, and thoſe *Arts* almoſt gone with the *Artiſts*, which ought to be conſidered and revived. *Latten and Braſs works.*

The chief *Mines* which produce *Silver* now in working (though not effectually) are thoſe *Mines Royal* at *Coomſumblock*, and the *Darren Hills*, *Coommervin*, *Coginean*, *Tallahont*, *Coonuſtwith*, *Tredvle*, *Thruſcott* and *Roſcevawre*; which were the old *Roman Works*. Near to which are conveniently placed the *Smelting* and *Refining Mills*, which therefore are called the *Silver Mills*. All which are in the Townſhip of *Skibery Coed*, in the Pariſh of *Llanny Hangell Genue Glynn*, alias *Llany Hangell Caſtle Qualton*, in the Countrie of *Cardigan*, alias *Shire Abertivy*. *Silver Mines.* *Silver Mills.*

Theſe five great *Works* were wrought for many years with the joint Stock of the firſt *Incorporators*, under the Conduct of themſelves; but afterwards Sir *Hugh Middleton* undertook thoſe in *Cardiganſhire*, paying 400 *l. per annum* Rent to the *Society*, and he cleared Monethly the ſumme of 2000 *l.* and had he not diverted his Gains to the making of the *New River* from *Ware* to *London*, certainly he would have been Maſter of a Maſs of Wealth; but great Wits and Purſes ſeldom know how to give bounds to their Deſignments, and by undertaking too many things, fail in all. And we may further give credit to the Beneficialneſs of thoſe Mines, whenas Mr. *Thomas Buſhell*, by his Knowledge and Ingenuitie to work

them to the best advantage, did find business enough there for a *Mint*, and with the Product thereof made provision for the Cloathing of the late *Kings whole Army*. These two last are particularlie mentioned, that the Product of the others may be collected by the Instances of these.

And as for the advantages which the due management of these would produce, they are hinted in Chap. V. & VI. But it might be added with a submissive Confidence, that with due care herein we might give Law to all *Europe*, as to all *Utensils* of *Metals*, whether considered *Domestick* or *Publick*, *Civil* or *Martial*.

And the Advantages being so, we may justlie infer, that by the not dulie and carefullie managing of this Affair, the Disadvantages are in the same degrees as much prejudicial to the Interest of this *Kingdom*, as the due use of them would be *profitable*.

For it is clearlie demonstrable, that everie Year for manie Years past, this Kingdom hath by negligence herein lost a *Million of Money*, which by vigilance they might have saved: whereby we want when others abound with our *own natural Store*.

To give a particular Demonstration of these *Five Works* would make this Treatise too large; but because it may be satisfactorie to some Persons, by a Scheme or Map to see the Manner and Position of the *Silver Mines*, whereby they may judge of others, here is affixed a Plot of the Mines at *Come-some-luck* in *Cardiganshire*, as also an account of the Materials and Number of Men belonging to them, with the Officers for the Mines, Mills and Mints, for the better direction to such as may undertake the like.

A Map of the Mine of Come-some-luck.

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M

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A Map of the Mine of Come-some-luck.

B
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COMSUMLOCK HILL.

A 1, 2, 3, 4. The old Works of Sir *Hugh Middleton* and Mr. *Buſhell.*
to B The Round Holes ſignifie the Shafts of the Mine.
B The Windlace to wind up Oar out of the Shafts.
CD A New Vein.
E Sir *Hugh Middleton*'s Adit which carried but that Level.
F The New Adit which carries on the Great Level now working.
G Mr. *Dickinſons* and Mr. *Hills* Adit to drein the Caſtle Works.
H Sir *Hugh Middleton*'s decayed Chappel.
I The old Stamping Houſe.
K The Smelting Mills.
L A great Space of Ground not yet wrought, to be ſuppoſed ſix miles from the Hill.
M The Brook that divides the Hill.
N The Stream which drives the Mills.

A
B
K
C
E
G
F
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H

THE DARREIN HILLS, OR ROMAN WORKS.

A 1, 2. The old Roman Fort.
B The Roman Trench through and croſs the Hill.
C The Mine Works.
D A great ſpace of Ground never wrought.
E The Shafts to the Mines.
F The Small Brooks which divide the Hills.
G The Places for Adits to the Mine.
H The Rake of the Mine.
I A Trench croſſing the Darrein Hills to find Oar.
K Another Trench for that purpoſe.
L A Paſſage for Horſes to carry Oar.

Chap. XXV.

Of the Silver Mills.

ABout three miles from *Tallibont* there is a certain Stream of Water, which falls into four great *Wheels*, whose Turning guides the rising and falling of the *Bellows*, and *Stampers* which belong to the *Hearths* and *Furnaces*, for *Smelting*, *Stamping* and *Refining*. And that the Nature of them may the better be known, here followeth a Particular taken in *Anno* 1667, of all *Utensils* and *Attendances* to them belonging.

At the great Smelting Mills.

Five Hearths with Backs, Cheeks, Workstones, Iron Plates, and other necessaries.

Five Pair of large Smelting Bellows with Beams, Frames, Swords, Triddles, Cogs, and all things to them appertaining; one new large Water-wheel with Water-troughs, Sluces, and other necessaries convenient for working the said five Hearths.

One great Pair of Scales, with ten Half-hundred Weights of Lead, and other small Weights needful.

Three Wooden Measures for White Cole, six Wheel-barrows, six Shovels of Iron, with Iron Forks and Tongs, five Moulds, and a Ladle for Casting.

And to these belong 10 Men, and these five Hearths may well imploy 500 Miners. 10 *Men.*

In the Oar-house.

One great Beam with Scales and Iron Chains, and several Weights for Oar.

1 Man. 1 *Man.*

In

In the Old Mint-house.

One Pair of ſmall Bellows, one Wind-Furnace to melt Silver in, made with Brick and Iron bars; one large Beam of Iron, and Braſs Scales, with ſeveral piles of Braſs Weights, and other Weights to weigh Silver with; one great Iron-bound Cheſt with three Locks, formerly uſed for the Coyners there, with old defaced Stamps therein, one Table-counter with Cupboards, Shelves, &c.

1 Man. 1 Man.

In the Stamping Mills.

One large Shed lately erected over certain Stampers, with a new Frame for them; three ſets of Stampers, one for wet Slags, one for dry, and one for Bone-aſhes, all faced with Iron, and beat upon great Iron Planks caſt for the purpoſe only; one large Water-wheel with Troughs, &c. for drawing the ſaid Stamps, and the annexed Mill to grind Bone-aſhes, with a pair of Stones, and all things neceſſary for Grinding and Sifting bone-aſhes in order to Refining.

1 Man. 1 Man.

One Smiths ſhop with Bellows, Tongs, Anvils, Hammers, Vice, Sledges, Grindſtone, &c. thereunto appertaining.

1 Man. 1 Man.

Six great Tubs (of Cask) Buddles, Sieves, Rakes, Shovels, and other neceſſaries for waſhing and cleanſing of Slags.

1 Man. 2 Men.

At the Refining Mill.

Several Troughs and Sluces for the conveying of Water to the Mill, one large new Wheel, that carrieth three

three Pair of bellows, with Swords, Beams, Truddles, Frames, Cogs, and all things appertaining in good order.

One Pair of very large bellows for the Teſt onely, with a great Frame or Model of Iron caſt, to make the Teſt in, with a great Cap of Stone in a Caſe of Iron fit for Refining; as alſo an Engine or Winlace, with Ropes and Pullies to draw up the ſame, with ſeveral Refining Irons, Feeding Plate of Iron, Tongs, Furnace with Iron door, grates, and bars of Iron, &c. neceſſary thereto, one pair of reducing bellows and furnace to melt the Litharidge into Lead, after refining with Irons, &c. neceſſary thereunto. 2 *Men.*

2 Men.

One Pair of bellows and Furnace for melting of Slags, with Iron bars, Shovels, &c. neceſſary thereunto; one planck'd Plate for tempering the bone-aſhes with beaters, and a Room made fit to lay Corn in. 2 *Men.*

2 Men.

At the Red Lead Mill.

One great Water-wheel, with ſeveral Sluces, Troughs and Dams thereunto belonging; four Pair of ſtones for grinding Red Lead, one large Oven with ſeveral Chimnies for making and colouring Red Lead, with Iron forks, Rakes, Shovels, &c. for the ſame; as alſo one great Iron Door and Door-caſe to the ſaid Oven, and two other Iron Doors in Iron Frames, with Iron gates and and bars to the Fire-hearths of the ſaid Oven. One great Copper Baſon to waſh Red Lead in, one Iron Ladle, Tunnel, &c. one great Beam and Scales to weigh Red Lead with, ſeveral ſets of Coopers Tools, great Plains, &c. neceſſary for making Red Lead Cask. 2 *Men.*

2 Men.

Materials at the Mines Royal.

At *Tallabont* three great washing Tubs, two brass wyer Sieves, one Beam and Scales with Weights for Oare, one great Trewerne with Iron wheels to carry out deads belonging to the Addits, as also Pumps, Timber, Ropes, and other necessaries belonging to those works.

Washers 2.

At Coginian, one Smith-shop with Bellows, Anvil, Hammers, Sledges, &c. for sharpning of tooles for the works, six tubs, several Iron Riddles, Sieves, Buddles, Rakes and other necessaries for dressing of Oare, with
2 *Washers.* one beam, scales and weights for weighing thereof, several Pumps, Ropes, Timber, &c. belonging to the said work.

Washers 2.

Also several tubs and sieves for dressing of Hillock Oar at Coomervin, and Coomsumblock, with Timber, Pumpes, and Scales to weigh Timber therewithall, and four dozen of Oare bags to lie in the Carriers hands and Custody.

To keep these Mineral works in constant repair, there is alwaies besides the Smith, a Carpenter continually attending.

Officers necessary to be imployed by the Society.

A *Treasurer.* 2 *Correspondents.*
A *Supervisor* of the *Mills* and *Works.*

One *Master worker*, or *Cheif Steward*, who ought to understand the whole concern of the *Mills* and *Works*, both as to *Smelting* and *Refining*, and all materials thereunto belonging, as *White coal*, *Black coal*, and *Charcoal*, and also to be able to assist the *Steward* of the *Mines* in making contracts with the *Miners*, the best and savingest way

way for the good of the works, and the undertakers.

One *Under-Steward* to recide at the Mines, and to attend the *Miners* and their works, and to see they work them fairly, and according to their Contracts, and also to dyal and level the works, and as occasion requires to provide *Timber* and other necessaries, and to see the *Oare* well cleansed before it be sent to the *Mills*, and to keep an account thereof as it is sent in by the several Carriers.

One *Paymaster* to be a good Accomptant to recide near the *Mills* to pay the several *Miners* and workmen, their Accompts being first made up by the Master-worker and Steward of the Mines, and fairly entered by him.

One *Clark* as an ordinary person to attend daily on the *Mills*, to receive in, and see measured and weighed, and to deliver out by measure and weight all *White coale*, *Black coale* and *Oar*, as they daily come in; and to keep an exact accompt of all Oar delivered to the *Smelters*, that the *Mill* Book may agree with the *Stewards* of the *Mines*.

Also one *Carpenter* and one *Smith*.

Besides these there are about 50. or 60. *Carriers*, according to the quantity of Oar; raised with horses, who usually carry two bags of Oar, containing 200. weight, which they deliver to the Clark imployed for that purpose, who is constantly to attend the bringing in thereof, who keeps several *Tallies* with such *Carriers* as brings the same, which *Tallies* (the Carriers being gone for more Oare) are fairly entered by him which keeps the *Mill Book*, by which the quantities are known, and from which works such Oar comes, and when the same is delivered forth to the *Smelters* to be wrought, he which keeps the *Mill-Book* and stands charged therewith, delivers the same to the several *Smelters* that are to work it, and keeps an exact accompt thereof, by which the product of the several *Oars* doth more certainly appear. 1

These are all the Officers and Agents needful, unless upon great encrease of works and workmen, and then one

one other *Steward* to aſſiſt at the Mines, to ſee the Oar clean and weighed, will be fit.

The *Myners* are to finde themſelves *Iron*, *Steel* and *Candles* at their own charge.

The *Maſters* are only to finde *Tymber* for the Works, and *Ropes*, *Pumps*, *Tubs* and *Sieves* to cleanſe the *Oar*, and *Bags* to carry into the *Mills*.

Now this *Maſter-Worker*, *Chief Steward*, *Chief Eſſay-Maſter*, or *Chief Refiner* (for theſe are his ſeveral Titles) anſwering the greatneſs of his Truſt, for he is as it were Judg, between the King and the *People*, his *Prerogative* and their *Propriety*, by diſtinguiſhing *Mines* and *Oars*, and by *Aſſaying* the *Oars*, he is to give his judicious determination therein, founded on the *Artificial Method* before-mentioned. And being thus formed in Ingots, Cakes or Dollers, they are uſually in groſs called Bullion.

CHAP. XXVI.

Of the Mint and Officers belonging to it.

THE *Silver* and *Gold* being thus extracted into *Bullion* by *Labour* and *Art*, certain Officers of the Societies, or of their *Leſſees*, are obliged to carry it to the *Kings Mint*, which ſignifieth with us the place where the Kings *Gold*, *Silver*, or other *Mettall* is *coyned* or formed into ſuch *ſhape*, or with ſuch diſtinguiſhing *Impreſſions* as he thinks fit. This *Mint* is at preſent, and long hath been in the *Tower* of *London*: But it appears by ſeveral *Coines* of *Silver* and *Gold*, that there was a *Mint* at *Dunwich* in the County of *Suff.* in the time of *Hen.* 2. and *Hen.* 3. Afterwards at *Callice*, and of late years one erected at the *Silver Mills* in *Cardiganſhire*, and at *Shrewsbury*, and in other parts of the *Kingdom*, according to the Kings occaſions. The *Officers* belonging to it have not been always alike, but at this preſent they are theſe.

Anno 21. *Rich.* 2. *c.* 16 *& Anno* 9. *Hen.* 5. *Sta.* 5. *cap.* 5.

The

The *Warden*, who is the Chief of the reſt, and is by his Office to receive the *Silver* from the *Goldſmiths*, and to pay them for it, and to overſee all the reſt belonging to this Function; his Fee is 100 *l. per Annum.* The *Maſter-worker*, who receiveth the Silver from the *Warden*, cauſeth it to be *melted*, and deliver eth it to the *Moniers*, and taketh it from them again when it is made; his Allowance is not any ſet Fee, but according to the Pound-weight. The thi d is the *Comptroller*, who is to ſee the Mony be made the juſt *Aſſiſe*, to overſee the Officers and controll them if the Monie be not as it ought to be; his Fee is 100 *Marks per Annum.* Then is the *Maſter of the Aſſay*, who weigheth the *Silver*, and ſees that it be according to the *Standard*; his Yearly Fee is alſo 100 *Marks.* Then is the *Auditor* to take the Accounts and make them up, and audit them. Next the *Surveyor* of the Melting, who is to ſee the *Silver* caſt out, and not to be altered after it is delivered to the *Melter*, which is after the *Aſſay-Maſter* hath made trial of it. Then is the *Clerk of the Irons* to ſee that the *Irons* be clean and fit to work withall. Then the *Graver*, who graveth the Stamps for the Monie. Then the *Smiter of Irons*, after they be graved, ſmites them upon the Monie. Then the *Melters*, that melt the *Bullion* before it come to the *Coining*. Then the *Blanchers*, who do *anneale*, *boil* and *cleanſe* the Monie. The *Porter*, who keeps the Gate of the *Mint*. Then the *Provoſt* of the *Mint*, who is to provide for all the *Moniers*, and to overſee them. Laſtly, the *Moniers*, who are ſome to *ſheer* the Monie, ſome to *forge* it, ſome to *beat it abroad*, ſome to *round* it, and ſome to *ſtamp* or *coin* it; their Wages is not by the Day or Year, but uncertain, according to the Weight of the *Mony Coined* by them. There are other ingenious ways uſed by Screws, &c. which may be ſeen at the *Tower* in *London*.

Warden.

Maſter-worker.

Comptroller.

Aſſay-maſter.

Auditor.
Surveyor.

Clerk of the Irons.

Graver.
Smiter.

Melters.

Blanchers.
Porter.

Provoſt.
Moniers.

Chap. XXVII.

Of Money.

Metall being thus *Coyned* or Minted, it is called *Coyn* from *Cudere* to forge, or from *Communis*, becauſe it is then made common, or from the French word *Coigne*, which ſignifies a *Corner*, becauſe moſt of the *Coynes* anciently were made with *Angles*, and ſome at this day in *Spain* and *France*.

Or it is more probable, *Verſtigan* makes King and *Cuning Synonyma's*, ſo may *King*, *Cuning* and *Coyning*; for his *Regality* is ſhewn by his *Coyn*, and to know the intrinſick value, uſe and *allays* fit for *Coyn*, ſhews his *Cunning*; for we uſe that word to expreſs a *ſubtilty*, or exquiſite knowledge of any *Art* or *Science*.

But the *Romans* had three names for *Coyn*; *Pecunia* from *Pecora*, Cattel; becauſe men who abounded in Cattel were accounted *rich*, and call'd *Pecuarii*; and now thoſe who abound in Coyn are called *Pecunioſi*; The other name they gave was *Nummus* from *King Numa* as 'tis conjectured, who firſt gave an Impreſſion on them; or from *Numero*, and therefore when money was paid, they ſay, and ſo we in our Law, it was paid *Pecuniis numeratis*.

But it may as properly come from *Numen* a *Deity*, for the *Romans* had *Tutelary Gods* for every thing, and thoſe who write of *ſubterranean ſpirits* (if credit may be given to their ſtories) would induce us to believe the ſame, and indeed our *Welch Miners* are of that opinion: for, ſay they, when we approach to the *Maſter-vein* of a *Mine*, or near to any danger by digging too near the irruption of waters, they uſuallie here *knocking*, which they call the *Knockers*, or a noiſe like that which their own *Pick-axes* make, both in expecting *profit*, or ſhunning *danger*,

(A

(A Diſcourſe of this is printed by Mr. *Buſhell*, which hapned in the Mines at *Tallabont* in *Wales*:) and ſo the *Knockers* may be called *Numina Mineralia*, or the *Tutelary ſubterranean ſpirits* of our *Mines*.

The third name they gave it after it was *Coyned* or Minted was *Moneta*, which we Engliſh *Money*, and St. *Auſtin* ſays it was derived from *Monere*, to admoniſh, and as it were to warn us, that all our diſpoſals of it, ſhould be *Honeſt*, *Juſt*, *Honourable*, and to *Charitable Ends*.

Chap. XXVII.

Of Artificial Metals and Money.

THe Manner of *Adulterating* and *Sophiſticating Metals* and Moneys, is an Art belonging to *Alchimy*, and not properly the ſubject of this *Hiſtory*. But in reſpect that by the *Artifices* of that *Art* our *Staple* and *Standard Coyn* is abuſed, the baſer *Metal* being ſo overlaid or tinctur'd, that the Eye is deceived, or ſo curiouſlie intermixed with *baſer Metal*, or other Ingredients, that the very Judgments of leſſer *Artiſts* are alſo deceived, (eſpeciallie when neither *Touch* nor *Fire*, (only weight) can diſtinguiſh them from *better* Metals) it is neceſſarie to have ſome remedies againſt ſuch Impoſtures: And it ſeems there were of theſe *ſubtilties* practiſed in former Ages; for we finde in *Poultons* Statutes, 5 of *Hen.* 4. *cap.* 24. theſe words, Item, *It is ordained and eſtabliſhed, that none from henceforth ſhall uſe to multiply Gold or Silver, nor uſe the craft of* Multiplication, *and if any the ſame do, that he incur the Penaltie of Felony in this caſe*: Now that which this Statute calls *Multiplying* and *Multiplication*, is either by counterfeiting *Metals*, or adding greater *Allay* then the *Standard* allows, or by *clipping*, or otherwiſe leſſening their due *weight* and proportions, and this *Statute* had ſo good effect, that our *Records* take no more notice

of ſuch *Artiſts*, till near 50 years after; for Mr. *Trinn* in his *Aurum Reginæ* ſaith, that in the 34th. of the Reign of *Henry* VI. the *King*, by advice of his *Council* and *Parliament* did then grant 4 ſucceſſive *Patents* and *Commiſſions* to ſeveral *Knights*, *Citizens* of *London*, *Chemiſts* *Monks* and *Maſs-prieſts* (*non obſtante* the Law of *Henry* IV.) to find out the *Philoſophers Stone* or *Elixir*, which would not only cure all Diſeaſes, and make Men live to the utmoſt poſſibility of Nature; but likewiſe *tranſubſtantiate* other *Metals* into moſt true and ſolid *Gold* and *Silver*, to the great benefit of the Realm, and the enabling the *King* in very few years to pay all the Debts of the *Crown* in real *Gold* and *Silver*; and theſe *Commiſſions* and *Patents* (ſaith he in his Marginal Notes) the King granted to *Eccleſiaſticks* upon this very account, that becauſe they were ſo good Artiſts in *Tranſubſtantiating Bread and Wine* in the *Euchariſt*, they might as well *tranſubſtantiate baſer Metals into better*. But it ſeems the King (upon better advice) did in the 35th. of his Reign grant new Letters Patents to ten ſeveral Conſiderable Perſons of Eminent Qualities, (therein mentioned) to judge and certifie to Him whether the thing were *practical or no*, and whether it would conduce more to the good or hurt of the *Kingdom*. But it ſeems Mr. *Prinn* with his indefatigable Labours could not find any Report upon the Patent, whether or no the *Philoſophers ſtone* was found, or whether the Kings debts were paid thereby; or elſe he reſerved that ſecret to himſelf.

However our Laws take little notice of them till the 7th. of *Edward* VI. in *Dier* 88. when one *Edan* confeſſed himſelf guilty of *Multiplication*, viz. that he had practiſed to make the Fifth Eſſence, and the *Philoſophers ſtone*, whereby all Metals may be made Gold and Silver; and alſo that he had accuſed one *Whally* then Priſoner in the Tower, that he did move and procure him to practiſe that Art, and that *Whally* had imployed Monie for *red wine* and other things neceſſary for that *Art*; and becauſe the offence

offence was but *Felony Eden* the Principal was pardoned by the General Pardon, but *Whally* as Acceſſory to the Felony was excepted, as one of thoſe who were then in the Tower.

Now beſides the former Reaſons this may be added as one very probable, why the *Queen* did frame theſe *Corporations*, *viz.* that they might ſee and inſpect thoſe *Impoſtures* and *Sophiſtications* ſo deſtructive to Commutative Juſtice, and to repreſent the Reformation thereof to Her Self, or to thoſe which ſhould ſucceed Her, whether done by *Foreiners* or *Natives*. Nor was there ever more ground for the ſame then in this Age, where the *Arts* of this nature are ſo much practiſed, leſt their Delights (which in themſelves are commendable, producing moſt admirable effects in their ſeveral Operations) ſhould tempt men to make the innocent and unskilful to receive thoſe things for real and natural, which are but adulterated by their *Arts*. And therefore this Hiſtory was writ, that the *Societies* may be known, and the Perſons who at preſent conduct the ſame, and that their aim is not at the *Philoſophers ſtone*, *Elixir* or *Quinteſſence* (which though ſeveral in name are one in intent) but their chief buſineſs is to take care that the *productions* of our *Mines* and *Metals* may go to their right uſe, that is, for the *publick good*. And therefore to conclude this Firſt Part, whoever ſhall aim at this *Philoſophers ſtone*, according to the agreement of all Writers therein, they muſt be Men of upright and unblemiſht Lives and Converſations, free from *Vice*, and practiſers of all *Moral Vertues*, Contemners of the *World*, and onely thereby to ſtudy the publick good of others, and not enriching themſelves, and from ſuch there is no fear of danger, becauſe their Study is onely to do good and not to deceive; nor is there much danger in the other, who under pretence of gaining this Rarity do but delude themſelves and others, becauſe their Impoſtures may ſoon be diſcovered by that Wiſdom and Care which properly belongs to theſe Societies, and humbly recommended to them.

THE

SECOND PART

OF THE

HISTORY

OF THE

Mines Royal.

THE SECOND PART OF THE HISTORY of the MINES ROYAL.

CHAP. I.

An Abſtract of the Original Grants of the Society of the City of London, *of and for the* MINES ROYAL.

1.

QUEEN ELIZABETH by Letters Patents, dated the 10th. of *October*, in the 6th. Year of Her Reign, did grant unto *Houghſetter* and *Thurland*, and their Heirs for ever, License to ſearch for *Mines*, *Oars* or *Ewres* of *Gold*, *Silver*, *Copper* or *Quickſilver*, in *Yorkſhire*, *Lancaſhire*, *Cumberland*, *Weſtmerland*, *Cornwall*, *Devon*, *Glouceſterſhire*, *Worceſterſhire*, and in *Wales*; and to try and convert the ſame unto their own profit, ſo as they ſearch not under any *Caſtles*, *Forts*, &c. nor within any *Houſes*, *Gardens*, &c. of any Subject without their conſent, making recompence for all *damages*.

2. None to dig or ſearch for *Mines Royal* without the Licenſe of *Houghſetter* and *Thurland*.

3. Power to purchaſe Lands within thoſe Counties or in *Wales*, as any other Subject may do.

4. None to attempt within 20 years to uſe any *Inſtruments* or *Tools* which they uſe, and hath not been uſed within 20 years laſt paſt, nor to uſe their manner of *roſting*.

5. Power to take up at reaſonable rates and prizes *Workmen*, *Timber*, *Wood*, *Coals*, &c.

6. All *Mayors*, *Sheriffs*, *Juſtices*, &c. to be aſſiſting to them in their Searches; and to apprehend others that ſhall attempt to *work* or uſe any *Tools* contrary to this *Grant*, and to commit them to *Gaol*.

7. No former *Grant* to be prejudicial to this *Grant*.

8. A Proviſo that the *Patentees* ſhall uſe their Privileges *joyntly* and not *ſeverally*.

CHAP. II.

An Abſtract of the Indenture of Covenants of the 10*th. of* Octob. 6 Eliz. *between the* Queen *and the* Patentees.

1. THe *Queen* reciting Her former *Grant* did covenant not to give Licence to any others to *ſearch* or *dig*, &c. in thoſe 8 Counties, or in *Wales*, and that none ſhall ſearch, &c. without conſent of the *Patentees*, and that She will hinder all others, &c. And that She will deface and deſtroy all *Tools*, *Inſtruments*, &c. ſave onlie the *Patentees*.

2. *Thurland* and *Houghſetter* covenant that the *Queen* ſhall have the *tenth* part of all *Gold*, *Silver* and *Quickſilver* found, neat without melting, the *tenth* part of all *Gold* and *Silver Eure* holding 8 pounds weight or upwards in every 100 weight; and the preemption of all *Gold* or *Silver*

Silver found neat or tried, paying 8 *d. per ounce* for *Gold*, and 1 *d* for *Silver*, leſs then the common rate; and for the firſt five Years 2 *s.* for ever 100 weight of *Copper*, or the 20th. part, at *Her Majeſties* Election. And after the firſt five Years 2 *s.* 6 *d.* or the 15th. part, at the *Queens* Election; and to be ſupplied with *Copper* upon a Years notice, paying as others; but in caſe the *Queen* do not require it, they may tranſport it, paying *Cuſtom* and *Subſidies*.

3. If the *Patentees* ſhall find a *Mine* where they cannot conveniently have *Wood* at reaſonable priſes, they may *tranſport* the *Oar*, paying half Duties for every 100 weight of *Copper* after the rate of 40 *s.* and ſo much ready Monie as the *Queens* Part ſhall amount unto.

4. A Covenant from the *Queen* that no former Licenſe ſhall be prejudicial to the *Patentees*, but they ſhall be preferred before others.

5. A Covenant from the *Patentees*, that if they find any rough *Pearls*, &c. the *Queen* to have the 10th. part, and *preemption* of the reſt, paying ready Monie; and ſuch portion of *Tin* as the *Queen* had in *Cornwall*, and of *Lead*, as was accuſtomed in other places.

6. A Covenant from the *Patentees*, that they will bring the *Queens* part of *Copper* and *Tin* to the place of *Coinage* in everie *Shire*, not above *one mile* diſtant by Land from the Melting place, or 12 *miles* by Water, to be *weighed* and *marked*, &c.

7. A Covenant from the *Queen*, that they and their Partners, not exceeding 24, whereof 16 to be *Engliſh*, ſhall be diſcharged of all *Fifteenths*, &c. and other Taxes, ſo their Names be certified into the *Chancery* within ſix Moneths, where they may have their *Warrant of Allowance*, &c.

8. A Covenant from the *Queen*, that they may bring in ſuch *Strangers* as they need to work, being no *Enemies*, and to be received into the *Queens protection*, and to be Indenizon'd if they will.

9. A

9. A Covenant from the *Queen*, that they may bring in *Victuals*, and *Tools*, and *Instruments* for the Workmen and the Works, as they shall need, *without Custom*, &c. so as Entrie be made thereof in the *Custom-house*.

After this Grant followed the Suit between the *Queen* and the *Earl of Northumberland* before mentioned; and upon a long Debate, and great Learning shewed by all the Twelve Judges, as may be fullie seen in *Plowdens* Reports, Nine of the Twelve Judges gave their Judgments according to the substance of this following Abstract.

CHAP. III.

An Abstract of the Opinion of the Judges concerning a Mine Royal, *in the Term of Saint* Hillarie, *in the tenth Year of* Queen ELIZABETH, *being the Conclusive part of* Plowdens *Reports, concerning* Mines.

THere is a Diversitie between a *Mine* of *Copper*, containing in it self *Gold*, and a *Mine of Gold* containing in it self *Copper*; for when the *Mine* is called a *Mine of Copper*, containing in it self *Gold*, it is intended the *Copper* is the greater, and the *Gold* the less; for everie thing contained is less then the thing containing, and that which comprehendeth a thing is greater then the thing comprehended; and therefore where the *Copper* is the greater, the *Mine* takes his Name from that, and is called a *Mine of Copper* containing *Gold*: and by the same reason, if it be called a *Mine of Gold* containing *Copper*, the *Gold* whereof the *Mine* hath its Name is the greater, and the *Copper* the less. And this agrees with their Opinions who have treated of *Metallick matters*, and with the *Records* of the *Exchequer*, which prove that the *King* hath the *Mines of Copper* containing or holding *Gold* or *Silver*, although the *Gold* or *Silver* be the less.

But

But how it ſhall be eſteemed the greater or leſſer is the Diſpute; that is, whether it ſhall be taken according to the *quantity*, or *quality*, or *value* thereof. Some are of opinion according to the *quantity*, ſaying, that that thing which comprehendeth an other, is greater then the other thing comprehended; as a Hogſhead of Wine, or a Barrel of Beer, for the Hogſhead in quantitie is greater then the Wine, and the Barrel then the Beer, but not in value; and yet it takes his name from the greater, and therefore is called a Hogſhead of Wine. And the *Mine of Copper* containing *Gold* hath its name from the greater in *quantity*; but not as from the *value*, for in the *Mine of Copper* containing *Gold* the *Gold* may be of the greater *value*. And herein regard ought to be had to the *value* of the *Gold* or *Silver*; for if there be but a Quill full of *Gold* or *Silver* in a great quantitie of *Copper*, there is no reaſon that that ſmall *quantity* ſhould be reſpected; but the *Gold* or *Silver* ought to be of ſome *value* of it ſelf, over and above the charge, and over and above the *baſe Metal* conſumed in getting thereof; for if the *quantity* of the *value* be not reſpected, then the *Gold* or *Silver* (how little ſoever they be) ſhall entitle the *Crown* to all the *Mines* of *baſe Metal* in the *Realm*. For the Writers of *Metals* do agree, that there is naturally ſome proportion of *Gold* or *Silver* in every *Metal*; and the *Smelters* and *Refiners* do make it evident, that there is in *Copper* naturally *Gold* and *Silver*, and in *Lead* and *Iron* there is naturally *Silver*. And ſo if there ſhould be no regard had to the *quantity* of *Gold* or *Silver* which is in the *baſe Metals*, the King ſhould have all the *Mines* of *baſe Metals* in the *Realm*, and the Subject having *Mines* of *baſe Metals* in his own Lands, they are of no effect: for there is not (according to the ſaid Authors) any ſuch *Mine* either in this Kingdom or elſewhere, which hath not ſome *Gold* or *Silver* in it.

And therefore it ſeemeth reaſonable to conſider the nature of a *poor Mine*, and the *value* of the *Gold* and *Silver* in the *baſe Metal*; and that the Product be of ſuch *value*,

that it countervail the charge of getting it, or otherwiſe there is no reaſon that it ſhould draw the Propertie of the *baſe Metal* to the Crown; but if otherwiſe, then it is to be a *Mine Royal*.

CHAP. IV.

An Abſtract of the Letters Patents dated the 28th. of May, *in the 10th. Year of* Q. ELIZABETH, *Incorporating for ever the Society of the* MINES ROYAL.

1. RECiting the Letters Patents granted to *Tho. Thurland* and *Daniel Houghſetter*, dated 10 *Octob.* in the 6th. Year of Her Reign, &c.

2. Grants Power to *aſſign* to any Perſon or Perſons Parts and Portions of their ſaid Privileges, Immunities, &c and ratifies and confirms all Immunities, Licenſes, Privileges formerly to them granted.

3. Grants the ſaid Licenſe, Immunities, Privileges, &c. unto *William* Earl of *Pembroke*, *Robert* Earl of *Leiceſter*, *James* Lord *Montjoy*, Sir *William Cecill*, Knight; *Tho. Thurland*, *Daniel Houghſetter*, *John Tamworth*, and *Jo. Dudley*, Eſquires; *Lionel Ducket*, Citizen and Alderman of *London*; *Benedict Spinola*, of *London* Merchant; *Jo. Loner*, *Will. Winter*, *Anthony Ducket*, *Roger Wetherall*, *Rich. Springham*, *Jeffry Ducket*, *Rich. Barnes*, *Will Platten*, *Tho. Smith*, *Will. Birde*, Gent. *Daniel Ulſtet*, a German; *Mat. hew Field*, *George Needham*, and *Edmund Thurland*, all the ſaid Privileges, &c. and Incorporates them for ever, and their Succeſſors, by the Name of *The Governours*, *Aſſiſtants*, *and Commonalty for the Mines Royal*, and ſo to continue for ever.

4. Enables them by that Name to *purchaſe* Lands, Tenements, &c. and to *alien*, *ſet* or *let* the ſame, and to *ſue*, *implead*, &c. and to be *ſued*, &c. in any *Court* before any

Judge

Judge Spiritual or Temporal, concerning any the Affairs belonging to the ſaid *Governours*, *Aſſiſtants*, and *Commonalty*, &c.

5. Power to chuſe one or two *Governours*, one or two *Deputy-governours*, and ſix or more *Aſſiſtants*.

6. Ordains *Lionel Ducket* and *Daniel Houghſetter*, the firſt Governours; *Anthony Ducket* and *Daniel Houſtet* the firſt four Deputy-governours; *Jo. Tamworth*, *Tho. Thurland*, *Benedict Spinola*, *John Loner*, *Will. Winter*, and *Roger Wetherall*, the firſt Aſſiſtants; untill the firſt Monday in *May* 1569, and thence if need be till others are choſen.

7. Power to keep *Courts*, to elect *Officers*, to make *Bylaws*, *Acts* and *Ordinances*, when and where they pleaſe within, &c. and to admit more *Members* Engliſh or *Strangers*, &c. and to *revoke* Rules, Ordinances, &c. Every Member to have half a quarter of a 24th. Part, or a Gentleman of 40 *Marks per Annum* in certain Counties a quarter part at leaſt.

8. To rule and govern *Officers*, *Miniſters*, *Workmen* and *Labourers* according to the Ordinances, &c. and to *remove Members*, and *impoſe Fines*, to *purchaſe Lands*, to elect one or two Officers who are called *Serjeants*, to collect the Fines, and to arreſt Body and Goods.

9. Their *Precepts* to be obeyed in *Cities*, &c. and all Officers *indemnified* for their obedience thereto.

10. A Member having a Quarter part, his *Voice* is as good as two Members of half Quarter parts, and ſo of the reſt greater Parts proportionably.

11. All *Mayors*, *Sheriffs*, &c. to be aſſiſting.

CHAP.

CHAP. V.

An Abſtract of the Indenture of Covenants between the Queen *and the* Corporation.

BY Indenture dated the 16th. day of *June* in the 10th. year of Queen *Elizabeth*, made between the Queen of the one part, and the Corporation of the Mines Royal of the other part; reciting the Indenture of Covenants of the 10th. of *October* in the 6th. year: The Companie did covenant with the Queen to pay, deliver, obſerve, perform, fulfill and keep all Paiments, Cuſtoms, Subſidies, Coinage, Summes of monie, Gold, Silver, Precious ſtones, Pearls, Copper, Parts, Portions, Preemptions, Covenants, Grants, Articles and Agreements in that Indenture ſpecified on the Patentees behalf to be paid, delivered, reſerved, performed, &c. And that the Queen ſhall have all ſuch Paiments, Summes of monie, Cuſtoms, Subſidies, Coinage, Duties, Gold, Silver, Precious ſtones, Pearls, Copper, Parts, Portions, Preemptions, &c. which the Patentees had covenanted the Queen ſhould have.

CHAP.

CHAP. VI.

An Abſtract of the Grant of the Mineral and Battery-works, 17 Sept. 7 Eliz.

1. BY Letters Patents the Queen granted to *William Humfrey* and *Chriſtopher Shutz* all manner of Ewres ſimple and pure, or mixt and compound, of the Metals of *Gold*, *Silver*, *Copper* and *Quickſilver*; and all other Minerals and Treaſures likely to be found in Earth or Ground in *England*, *Wales*, and the *Engliſh Pale* in *Ireland*; and of *Tin* and *Lead* in ſuch ſort as by Law is or hath been uſed, (*Copperice* and *Allom*, and the Mines in the laſt Patent excepted.)

2. Therein is granted Power to dig, to build Houſes, not to dig under Houſes, nor in the Mines in the laſt Patent excepted, without conſent, indifferent Perſons to award a recompence; none to uſe their Tools or Inſtruments, or to dig for 21 Years, Diſturbers of Workmen to be committed for ſix Moneths without Bail or Mainpriſe; to take up Neceſſaries for the Work, as Wood, Timber, &c. at reaſonable rates; and if the Queen be minded to work any Mines without the *Engliſh Pale*, then *William Humfrey* and *Chriſtopher Shutz* ſhall have like Privilege and Power as if the ſame had been granted.

3. Free for the Queen to reſume this Grant for Her proper uſe onely, and not to grant it to other Perſons; their Charge, Loſs, Expence, and Intereſt to be allowed by ſix indifferent Citizens, whereof two to be Aldermen, to be equally choſen; the Referrees to deliver a Certificate of the Charge to the Lord Treaſurer, who is to make paiment thereupon; and if after Reſumption the Queen ſhall decline the working, then *William Humfrey* and *Chriſtopher Shutz*, their Heirs and Aſſigns, to have the preference of Farming it, &c.

17 Sept. 7 Eliz.

A Patent to the ſame Perſons of the *Callamine ſtone*, or *Lapis Calaminaris*, within the ſame places, and with like powers, for the better Compoſition of the mixed Metal called *Latten*, in reducing it to be ſoft and malleable for Wier, and mollifying of Iron and Steel, and drawing and forging them into Plates for Armour, in all our Realm of *England* and *Wales*, and within the *Engliſh Pale* in *Ireland*, power to dig, *ut ante*.

CHAP. VII.

The Abſtract of the Indenture of Covenants between the Queen, *and* William Humfrey *and* Chriſtopher Shutz, *dat.* 17 Sept. 7 Eliz. *concerning the Mineral and Battery-works.*

1. FIrſt, the Queen covenants, that no other Perſons ſhall dig of or for what is granted.

2. *William Humfrey* and *Chriſtopher Shutz* covenant to pay unto the Queen a 10th. part of all *Gold*, *Silver* and *Quickſilver*.

Gold. 3. And for *Gold our* to pay for every 100 weight 8 pound weight of fine *Gold*.

Silver. 4. And for *Silver* the 20th. part, and the Queen to have the Preemption of the Oars, paying in every ounce of *Gold* 8 *d.* and in Silver 1 *d.* leſs then She can buy elſewhere, to be paid within 30 days.

Tin. 5. And for *Tin*, ſuch portion as the Crown hath in *Devenſhire* or *Cornwall*.

Lead. 6. For *Lead*, ſuch Cuſtoms and Profits as are uſed in other parts of the Realm.

Callamint. 7. *Callamint*, the 20th. part to the Crown, or the value thereof.

8. For

8. For every 100 weight of fine *Copper* during the first 6 years 2 *s.* or the 20th. part, at the election of the Crown; and after thoſe ſix years 2 *s.* 6 *d.* or the 15th. part, or the value thereof in Monie. *Copper.*

9. The Queen to have what She will of *Copper* for Her Monie, giving half a years notice.

10. If not, then power to tranſport the reſt, paying the Cuſtoms.

11. Licenſe to tranſport the Ewres, where no Wood is.

12. No former Grant to any other ſhall prejudice *Humfrey*'s Grant.

13. The *Copper* and *Tin* to be brought to the place of Coinage to be marked, not above 1. Mile by Land or 12 by Water.

14. Licenſe to bring over Workmen, being no Enemies to the Crown, and they to be indenizon'd by the Great Seal without charge.

15. Not above 8 Strangers to be Partners at one time, and not to have above one third part of the whole.

16. *Humfrey* and *Shutz*, &c. may bring over Victuals and Tools without Cuſtom.

17. The Queen to have power to reſume, paying to *Humfrey* and *Shutz*, their Heirs or Aſſigns, ſuch recompence as ſhall be adjudged by 6 Citizens, whereof 2 to be Aldermen.

18. If the Queen let them again, then *Humfrey* and *Shutz* to have the Refuſal.

CHAP.

CHAP. IX.

An Abſtract of the firſt Incorporation of the Company of the Mineral and Battery-works, dated the 28th. of May, *in the 10th. Year of* Queen ELIZABETH.

1. THe Queen, reciting former Letters Patents, dated the 17th. of *September*, in the 7th. Year of Her Reign, unto *William Humfrey* and *Chriſtopher Shutz*, whereby She grants unto them to ſearch, dig, and mine for the *Callamine ſtone* in all places of *England*, and within the *Engliſh Pale* in *Ireland*; and the onely uſe and commoditie thereof to have, and all ſorts of *Battery wares*, &c. and at their charge to erect Houſes neceſſary, &c. with divers other Powers, &c. And alſo reciting other Letters Patents, dated the ſame Day and Year; whereas before that time the Queen had given privilege to *Cornelius Devoz* for digging *Allom* and *Copperice*, &c. And reciting further the Grant to *Thomas Thurland* and *Daniel Houghſetter* to dig for Oars of *Gold*, *Silver*, *Copper* and *Quickſilver* in the Counties of *York*, *Lancaſter*, *Cumberland*, *Weſtmerland*, *Cornwall*, *Devon*, *Glouceſter*, *Worceſter*, and in *Wales*, &c. with liberty to grant and aſſign Parts and Portions, &c. Ratifies and confirms all Immunities and Privileges to *Will. Humfrey* and *Chriſtopher Shutz*, &c. And,

2. Doth give and grant unto Sir *Nicholas Bacon* Knight, *Thomas* Duke of *Norfolk*, *William* Earl of *Pembroke*, *Robert* Earl of *Leiceſter*, *William* Lord *Cobham*, Sir *William Cecill* Knight, Sir *Walter Mildmay* Knight, Sir *Henry Sidney* Knight, Sir *Francis Jobſon* Knight, Sir *William Garrat* Knight; *Rowland Hayward*, *John Tamworth*, *Peter Osburne*, *Thomas Cecill*, *Francis Agard*, *Thomas Fleetwood*, *William Roberts*, *Henry Codenham*, *Robert Chriſtmas*, *Roger Wetherall*, *William Patten*, *Chriſtopher Chewt*, *Thomas Smith*, *William*

Do-

Dodington, *William Birde*, *George Barnes*, *William Humfrey*, *Chriſtopher Shutz*, *Anthony Gammage*, *Richard Marten*, *Edmund Roberts*, *Francis Barty*, *Richard Hundford*, *Edward Caſtelin*, *Jo. Goodrich*, *Jo. Loviſon*, *William Williams*, *Chriſtopher Birkbeck*, and *Andrew Palmer*, that they by the Name of *The Governours, Aſſiſtants, and Society of the Mineral and Battery-works*, and their Succeſſors, ſhall be Incorporate into a Body Politick to continue for ever.

3. Grants them a Common Seal, Libertie to purchaſe Privileges and Authorities formerly granted to the ſaid *William Humfrey* and *Chriſtopher Shutz*, and to purchaſe Lands, Tenements, &c. by that Name, and to alien and ſell the ſame, and be enabled to ſue and be ſued, &c. in all Courts, and before any Judge Spiritual or Temporal, &c. in all matters touching their Society.

4. Liberty to chuſe two Governours, two or more Deputies, and eight or more Aſſiſtants, Sir *William Garrat* and *Rowland Hayward* the two firſt Governours, *John Tamworth* and *Peter Osburne* the two firſt Deputies, and *Thomas Fleetwood*, *Henry Cobbenham*, *William Birde*, *George Barne*, *William Humfrey*, *Chriſtopher Shutz*, *Anthony Gammage*, and *Richard Marten*, the 8 firſt Aſſiſtants, unto the firſt Thurſday in *Decemb.* after the Date, and from thence till new ones are choſen.

5. Power to aſſemble at their own pleaſure, and to keep Courts there, and to elect their Governours, &c. and to make Rules and Ordinances for the well-governing the Affairs of the Society, &c.

6. Power to admit others to be Members, and to diſmember, and to make Acts, and revoke the ſame upon occaſion at pleaſure; gives freedom to all the Society, Workmen, and Labourers, during the time of their Imployment, not to be impannelled upon Juries, &c.

7. Licenſe to admit Aliens and Strangers as well as *Engliſh*, and to miniſter an Oath, and deliver Copies of Admittances under their Common Seal.

8. To rule and govern according to the Laws, &c. and to do ſpeedy juſtice in putting them in execution.

9. To purchaſe Lands, &c. not held *In Capite*, nor above the yearly value of 100 *l.* over and above all charges. Power to ſet Fines, Pains, &c. upon any Member, Officer, Workman or Labourer, for any matter relating to the ſaid Society. And if any be diſobedient, they are to puniſh them as the quality of the Fault requires at diſcretion, which they are not to refuſe.

10. Power to make one or more Serjeant or Serjeants, who is impowered to levy and gather all Fines, &c. and to arreſt both Body and Goods in caſe of refuſal of paiment, in all places except Cities, &c. where the Mayor, &c. upon a Precept from the Society under their Seal, ſhall arreſt and attach, &c. and the ſame to deliver over to the ſaid Serjeant according to the tenour of the ſaid Precepts and the ſaid Mayor, &c. to be indemnified therefore.

11. Willing and commanding all Mayors, Sheriffs, &c. to be aiding and aſſiſting to the ſaid Society.

CHAP. X.

An Abſtract of KING JAMES *his Letters Patents, dated* Jan. 28. *in the ſecond Year of His Reign, Incorporates for ever* The Society of the City of London for the Mines Royal.

1. RECITING the Letters Patents granted to *Tho. Thurland* and *Daniel Hochſtetter*, dated the 10th. day of *October* in the 6th Year of *Queen Elizabeth*, and other Recitals.

2. Grants all Mines and Oars therein recited to *William* Earl of *Pembroke*, *Robert* Viſcount *Cranborne*, *Henry* Lord *Windſor*, *Thomas* Lord *Burgbley*, *Thomas* Lord *Gerrard*, Sir *John Popham* Knight, Sir *Edward Winter* Knight, Sir *Francis*

cis Popham Knight, Sir *John Smith* Knight, Sir *Roger Owen* Knight; *Francis Nedham*, *Arnold Oldisworth*, *Christopher Tolderus*, *William Gammage*, *Francis Beale*, *Otes Nicholson*, *Richard Danford*, *Edward Barnes*, *Emanuel Demetrius*, *Abraham van Delden Emanuel Hechstetter*, and *Daniel Hechstetter*; all Immunities formerly granted, and ratifies the same; and Incorporates them by the Name of *The Governours, Assistants, and Society of the City of London for the Mines Royal*; and by that Name to have Succession, and to continue for ever.

3. To chuse one or two Governours, one or more Deputies, and six or more Assistants; and to have a Common Seal, and to purchase Lands, &c.

4. *Robert* Viscount *Cranborne*, Sir *John Popham* Knight, the first Governours; Sir *John Smith*, and *Arnold Oldisworth* Esquire, the first Depury-governours; Sir *Roger Owen* Knight, *Francis Nedham*, *Christopher Tolderus*, *Will. Gammage*, *Francis Beale*, and *Otes Nicholson* Assistants, untill the first Monday in *May* 1605; and Annually that day to keep a general Court, and to elect Officers.

5. To keep Courts at such Places and Times as the Governours or Deputies shall think fit.

6. If any Officer elected die before the Year be expired, the Major Part to chuse another in his place.

7. Power to keep Courts, to ordain and enact Statutes and Ordinances, to admit or expell such as are deemed unworthy to be Members of the Company; as also for the good Government of the Society.

8. All Persons to be admitted, before they be admitted to have a Quarter Part appointed for term of Life at least.

9. A Gentleman, and a Freeholder of an Estate of Inheritance within certain of the 8 Counties, of 40 *Marks per Annum*, before Admission to have half a quarter part assigned, and to be admitted within 7 Years after the Date hereof.

10. An

10. An Oath to be administred to such as shall be admitted to be of the Company: and any Person admitted otherwise then is before expressed, not to be accounted a Member of the Company.

11. If any Person admitted to a Quarter or Half quarter Part, and shall either alien, renounce, or otherwise by Act of Court be removed from the same, he shall no longer be held a Member of the Society.

12. A full Court to have power to dismember such of the Society as they shall determine unworthy to remain of it: and their Dismembering being entered into the Book of the Acts of the said Company.

13. The Parties so removed not to be held Members without new Admission.

14. Powers to keep Courts for putting the Acts and Statutes to be made in due execution, as well to rule and govern every Member of this Corporation, as all the Ministers, Officers and Workmen, touching all Causes and Controversies concerning their Privileges.

15. Power to them or any Member to purchase Lands, not exceeding the yearly value of 100 *l.* nor held *In Capite*, above all charges and reprises.

16. Power given by Fines, Forfeitures or Imprisonment, to punish any Member, Officer or Workmen of the Company, for breach of any Rules or Acts to be made, or for any other Offence in the Affairs of the Society.

17. No person offending, and censured as aforesaid, shall refuse to be ordered by this Society.

18. Power to make an Officer or more in *London*, or elsewhere, and him or them to be styled *Serjeant* or *Serjeants of the Mines Royal*, who have power to levy, receive and gather all Fines and Forfeitures aforesaid; and for default of paiment to arrest as well the Body as Goods of the Offender.

19. The Offender being in any City or Town Corporate, upon a Precept under their Common Seal to the Mayor or Sheriff, &c. they to arrest or attach the Body and Goods

Goods of such Offenders, and them to deliver to the said Officer of the Company.

20. That the Mayor, Sheriff, or others, shall not be troubled for executing any Precept to them directed from the Company as aforesaid.

21. No Person to have Voice in Elections or other Affairs, not having half a quarter of one 24th. Part.

22. The Voice of every Person having a quarter Part to be held of as great account as the Voices of two others, having but half quarter Parts apiece. And so the Voice of any other having a greater Part then a quarter, to be esteemed of as great force as so many several other Persons, having but an half quarter Part apiece.

23. All His Majesty's Officers, &c. to be aiding and assisting to the said Governours.

CHAP. XI.

The Abstract of the Letters Patents of the Mineral and Battery-works of the 22th. of January, in the first Year of KING JAMES.

1. THe King reciting the Letters Patents of Queen *Elizabeth*, dated the 17th. day of *September* in the 7th. Year of Her Reign, whereby She granted to *William Humfrey* and *Christopher Shutz*, their Heirs, &c. Liberty to dig, mine, and search for the *Callamine stone* within Her Kingdom of *England*, and within the *English Pale* in *Ireland*, together with the benefit of working thereof; with other Metals, with divers Immunities and Privileges, &c. for the making of all *Wier* and *Battery-wares*, &c. and to erect and build Workhouses necessary.

2. And also reciting other Letters Patents, dated the same Day and Year, reciting by them, That whereas She had formerly granted Privileges to *Cornelius Devoz* for

mining and digging within Her Realm of *England* for *Allom* and *Copperice*, and for divers other Oars, &c. And further reciting Her Grant to *Thomas Thurland* and *Daniel Houghfetter*, of Liberty to dig and search for all Oars of *Gold*, *Silver*, *Copper* and *Quicksilver*, within the Counties of *York*, *Lancaster*, *Cumberland*, *Westmerland*, *Devon*, *Cornwall*, *Gloucester* and *Worcester*, and in *Wales*, &c. And by the said last recited Letters Patents the Queen grants to *William Humfrey* and *Christopher Shutz*, full power to dig within *England* and *English Pale* in *Ireland*, (except the said 8 Counties and *Wales*) for all manner of Oars and Metals simple and pure, or mixt and componnd; and of *Gold*, *Silver*, *Copper*, *Quicksilver*, and for all other Treasures, &c. and to erect many other Immunities and Privileges, &c.

3. And whereas the said *William Humfrey* and *Christopher Shutz* have heretofore granted divers parts and portions of the said Immunities, Powers and Privileges, &c. and whereas the said *William Humfrey* and *Christopher Shutz*, and all or most of their Assigns are since dead. And whereas the said Powers and Privileges, &c. are since come unto *William* Earl of *Pembroke*, *Robert* Lord *Cecill*, Sir *Julius Cæsar*, Sir *James Pemberton*, Sir *William Bond*, and Sir *James Lancaster*, Knights; *John Osburne*, *Thomas Cæsar*, *Francis Barry* sen. *Arnold Oldisworth*, *Christopher Tolderry*, *William Gammage*, *Charles Chewt*, *Henry Tamworth*, and *William Bond* sen. Esquires; *Henry Palmer*, *Francis Barry* jun. *Richard Danford*, *George Browne*, Gent. *Richard Marten* jun. *Nathaniel Marten*, *Richard Collins*, and *Alexander Foxwel*, &c.

4. Know ye therefore, &c. the King ratifies and confirms all the former Grants, Powers, Immunities, Privileges, Profits, &c. And also for the better Advancement of the said Works, grants to the last recited Persons, that they shall be for ever one Body Politick, and Corporate in it self in Deed and Name, by the Name of *The Governour, Assistants, and Society of the City of London of and for the*

the *Mineral and Battery-works*; to have Succession for ever, and liberty to have a Common Seal.

5. License to purchase any parts and portions of the Immunities, Privileges and Profits, &c. and also to purchase Lands, Tenements, &c. by that Name; and so to alien and sell the same; and so to sue, implead, &c. and to be sued, impleaded, &c. in any our Courts, before any our Judges Spiritual or Temporal, &c. touching the Affairs of the said Corporation.

6. Power to ordain two Governours, two or more Deputies, and 8 or more Assistants; and makes *William* Earl of *Pembroke* and *Robert* Lord *Cecill* the first Governours; *Francis Barty sen.* and *Thomas Cæsar* the first Deputies; and *Arnold Oldisworth*, *Christopher Tolderus*, *Charles Chewt*, *William Bond sen.* *Henry Palmer*, *Richard Dunford*, *Richard Marten jun.* and *Nathanael Marten*, the first Assistants, untill the first Thursday in *December* next, &c. and from thence untill new ones shall be chosen.

7. Liberty to assemble and meet together for the keeping of Courts, and ordering their Affairs, and for Elections of Governours, &c. yearly, and for making Laws, Rules and Ordinances for the good Government of the Society, for the admitting of Members, and for the Dismembering; and the same Laws, &c. also to change or revoke.

8. Indemnity to every Officer, Minister, Workman and Labourer from all injuries, &c. To admit Aliens and Strangers, and to administer an Oath, to give Copies of their Admittance under their Common Seal, and enter the same in their Register-book, and to do speedy justice to all.

9. Liberty to purchase Lands, &c. not holden of the King *In Capite*, or in Chief, not exceeding 100 *l. per Ann.* over and above, &c.

10. Power to impose Fines, Penalties, Imprisonments, upon any Member, Officer, &c. for any Offence touching the said Society; and in case of Non-payment

ment to sue for the same in any Our Courts of Record.

11. Power to ordain one or more Officer or Officers, to be styled *Serjeant of the City of London for the Mineral and Battery-works*, who shall have power to receive and gather the Fines, &c. and for Non-payment to arrest both Body and Goods, except in Cities, &c. where the Governours Precept is to be obeyed by the Mayor, &c. and they are to be indemnified for acting therein. And all Mayors, Sheriffs, &c. are to be aiding and assisting to the said Society.

12. Powers and Enlargements of some Defects in the former Patents concerning the *Callamine stone*, and all sorts of *Battery-ware*, *Cast work*, and all sorts of *Wier*. As for the digging and working of all sorts of Oars, of *Gold*, *Silver*, *Copper*, *Quicksilver*, *Tin* and *Lead*; and for conveying of *Water*, and to erect Houses for the Melting, &c. not to dig in Orchards, &c. without License. And shall give reasonable satisfaction for Damage as shall be agreed, or else to be referred; and if they disagree, then to be determined at the Council Table.

13. All Persons (except the said Society and their Lessees, &c.) prohibited to use the *Callamine stone*, or to attempt to dig for the same, or to melt or make into *Wier*, &c. or to dig for any Oars, or use any their Tools or Instruments without Licence.

14. All Persons commanded not to hinder or disturb the Works of the said Society, or any their Workmen or Labourers, upon penalty of 100 *l.* for every Offence, the one Moyety to the King, the other to the Society; and such other punishment by Imprisonment, &c. as shall be thought fit.

15. Power to the said Society and their Assigns, &c. to take up at reasonable wages and price Artificers and Workmen, Instruments, &c. and to buy Wood for Coals, and Timber, onely for the finding and melting the said *Callamine stone*, or the digging of or melting, &c.

of

of any the ſaid Oars and Minerals, &c. or for conveying of Waters: Except *prout*, &c.

16. Power at the Kings pleaſure to ſearch in other parts of *Ireland* without the *Engliſh Pale*, with like Profits, &c.

17. And the ſaid Letters Patents made to *Thomas Thurland* and *Daniel Houghſetter*, and the other made to *Cornelius Devoz* as aforeſaid, ſhall remain and continue ſtill in force. And that theſe Our Letters Patents ſhall remain and continue inviolable, &c.

18. Provided that if the King ſhall at any time be minded to reſume the Powers, &c. hereby granted, then he ſhall detain the ſame to His Own uſe, but not to let to any others; ſo as the Governours, &c. be firſt paid all their Charges, &c. as ſhall be adjudged by 6 perſons Citizens of *London*, whereof 2 to be Aldermen, &c. and upon their Certificate the Lord Treaſurer to make preſent pay without further order.

19. And if the King after His reſumption ſhall be minded to grant the ſame again, then the Society to be preferred, &c.

20. A Precept to all Juſtices, Barons, &c. that the ſaid Society, &c. ſhall have the benefit of theſe Preſents from the ſaid 17th. of *September* in the 7th. Year of Queen *Elizabeth*. And that they do not ſuffer any Action or Information againſt the ſaid Society, &c. touching any thing herein contained.

Chap. XII.

The Abstract of a Proclamation against Importation of Iron Wier, dated 7 Maii, An. 6. Car. I.

1. Whereas *Iron Wier* is a Manufacture here, and by that Trade many thousands were maintained, &c.

2. And whereas Our *English Wier* is of better use then any Forein *Wier*, especially for making Cards for Wooll, &c. as by several Certificates, &c. And whereas sundry Complaints have been made, &c. Therefore,

3. Well-weighing the danger and prejudice, and finding that sundry good Laws and Statutes have been formerly made against Importation thereof; By the advice of the Privy Council We do streightly charge and command all Persons from attempting to import into *England* or *Ireland*, &c. any Forein *Wier* or *Cards* made of Forein *Wier*, &c. upon pain of Forfeiture, &c.

4. Commanding that which shall be forfeited be carried to the several Custom-house where they are seised, without selling or compounding, &c. upon pain, &c.

5. Commanding all Officers attending our Customs to forbear to make Entries or Compositions for any the same Forein *Wier*, &c. but to seize the same as forfeited to the Uses hereafter specified, &c.

6. And whereas there hath been one evil use in buying old Cards and trimming them up, and selling them for new ones to the prejudice of the Cloth trade; therefore commands all Persons to forbear, upon pain of Forfeiture, &c.

7. And for encouragement to search and seize, a Moyety to him that seizeth, the other Moyety to the King.

8. Commanding all Mayors, Sheriffs, &c. to be aiding and assisting; all Customers, Searchers, &c. herein. And if

if any Mayor, Sheriff, &c. ſhall offend herein, to be proceeded againſt in the Star-Chamber by the Attorney General, &c.

CHAP. XIII.

An Abſtract of a Proclamation againſt importing Latten Wier, dated Aug. 19. *in the* 14th. *Year of* KING CHARLES I.

1. RECiting (as in the Proclamation precedent againſt importing of *Iron Wier*, &c.) prohibits the importation of any Forein *Latten Wier*.

2. Commanding all perſons to forbear to import it after *Michaelmas day* in the ſaid 14th. Year of K. *Charles* I. upon pain of Forfeiture.

3. And that all which ſhall be forfeited, ſhall be carried by the reſpective Officer (who ſhall ſeiſe the ſame) to the ſeveral Cuſtom-houſes, without ſelling or compounding upon pain, &c.

4. Commanding all Officers after the ſaid day to ſeiſe what ſhall be imported, and not to make any Entry or Compoſition; the one Moyety to the King, the other to the Officer who ſeiſeth the ſame.

5. Commanding all Mayors, Sheriffs, &c. to be aiding and aſſiſting to all Cuſtomers, Searchers, &c. at all times after the ſaid *Michaelmas day*, for the ſearching in any Ship, Cellar, Warehouſe, &c.

CHAP.

CHAP. XIV.

An Abſtract of the Reaſons for continuing the Braſs Manufacture in this Kingdom given in about five Years ſince to the Houſe of Commons by the Braſs Manufactors.

1. THat *England* is in a capacity to be the Staple of Braſs Manufactury for it ſelf and Forein parts, by reaſon of the inexhauſtible plenty of the *Caſtamine ſtone*, &c.

2. That Parlements have always encouraged Manufactories by means of great Impoſitions upon Forein Wares, whereby the Staple may be here for ſupplying Forein parts, eſpecially of Pins; which may alſo be done with *Latten Wier*, and would tend to great ſecurity and advantage, &c.

3. Seeing the Staple of Pins is now here, and not having *Latten Wier*, upon Embargo's or Wars beyond Sea, they may for want of Wier loſe their Trade, &c.

4. To prevent which His late Majeſty cauſed a Prohibition of all Forein *Latten Wier*, to continue the *Braſs work* here, which was diverted by reaſon of the late Troubles, &c.

5. That His Majeſty's Cuſtoms may not be diminiſhed, but rather increaſed, a Prohibition is not ſo much deſired as a larger Impoſition upon it, proportionable or more to that of the King of *Swedens* upon *Copper*, whereby we ſhall be enabled to work as cheap, &c.

6. The *Swedes* have ſince entered into a Corporation, with a reſolution for ſome time to be Loſers by their Goods, intentionally to ſubvert the Manufacture in *England*, endeavouring to inveigle away our chief Workmen, &c.

7. Theſe

9. These Braſs works being once down here, five thouſand pounds will not ſet them up again.

10. When theſe Works were laſt revived the Wier was at 8 li. *per* 100. but ſince, the *Swedes* have brought it to 5 li. 5. s. *per* 100. but upon the decreaſe of theſe Works they begin to raiſe the price, and ſo in time we ſhall be enforced to take it at their own rates.

11. The Complaint of the many Towns in *Somerſets* who live upon it, ſhew the great concernment of it.

12. Theſe works being brought to perfection, will cauſe the exportation to be as conſiderable to the Kings revenue, as the Importation now is.

13. The continuing of theſe Works in *England* will occaſion plentie of rough Copper to be brought in, and make it the Staple in time, of Copper and braſs, we having the means ſo plentifully here.

14. It is deſired, that the like encouragement be given him, as the Crown of *Sweden* gives their ſubjects, &c. We in *England* not being able to work upon equal terms, which by a *Medium* of raiſing the duty here upon the Forein *Latten Wier*, may eaſily be remedied, &c. This Kingdom being ſo fit for it by reaſon of the *Callamint* ſtone, which if we uſe not our ſelves, muſt either lie waſt, or be tranſported: and in theſe works many thouſand families will be emploied and maintained, and in time may be as fit to be exported by us, as 'tis now imported when and how they pleaſe, beſides the conſideration of the great importance, for the defence and ſtrength of this Iſland, &c.

Chap. XII.

The Abſtract of an Act againſt Importing Forein Wooll, Cards, Card Wier, or Iron Wier, Anno 14. Caroli II. Regis.

Reciting, that whereas by ſeveral Acts of Parlement made in the 3d. Year of *Edward* IV. and in the 39th. of Queen *Elizabeth*, and ſeveral former Statutes, no Cards for Wooll nor Iron Thred or White Wier ſhould be imported, by reaſon many Families of poor people by that Manufacture were maintained; Notwithſtanding contrary to the ſaid Statutes many Cards and much Wier have been brought in, &c. Be it therefore Enacted, that no Forein Wooll Cards or Card Wier be imported, nor any old Wier put upon new Boards to be ſold, upon the Penalties following, (*viz.*) upon Forfeiture of the ſame, or the Value thereof, the one Moyety to the King, and the other to ſuch perſon as ſhall firſt ſeiſe or ſue for the ſame, &c. Provided this Act extend not to hinder any one of Wooll Cards to cauſe them to be mended for their own uſe, or to ſell or tranſport them being old and overworn.

Chap.

CHAP. XVI.

The ſecond Opinion of other eminent Lawyers concerning Mines Royal.

ALthough the *Gold* or *Silver* contained in the baſe Metal of a Mine in the Lands of a Subject be of leſs Value then the baſe Metal; yet if the *Gold* or *Silver* do countervail the charge of the Refining it, or be of more worth then the baſe Metal ſpent in Refining it,

THIS IS A MINE ROYAL:

and as well the baſe Metal, as the *Gold* and *Silver* in it, belong to the Prerogative of the Crown.

16 CAR. I. 9 *Feb.* 1640.

John Glanvill
E. Harbert
Ralph Whitfield
Oli. St. Johns

25 Feb. 1640.

John Herne
Chriſt. Fulwood
Harb. Grimſton
Edw. Bagſhaw
Jo. White
Jo. Glover
Ja. Haward

26 Feb.

Euſ. Andrews
Ed. Prideaux
John Maynard
Tho. Culpeper

27 July 1641.

CHAP.

CHAP. XVII.

Rules Agreed upon by the Societies *of the* Mines Royal, *and* Mineral Battery-works, *concerning the letting of Leaſes, to Owners, Diſcoverers, or Undertakers, of ſuch Mines as hold Gold or Silver, and the Manner and Conditions of the Leaſes.*

1. IF any Owner or Proprietor do diſcover any Mines Royal in his ground, he ſhall have as many Leaſes as he pleaſeth, he covenanting for every Leaſe, according to Conditions underwritten.

2. If any Farmer or Poſſeſſor do diſcover a *Mine Royal* in the Land which he uſeth, which was never wrought, he ſhall have the Moietie of the profits, and the Proprietor the other Moietie, if they will jointly work, and in that caſe a Leaſe ſhall be made to both of them; but if the Proprietor refuſe to joyn in ſuch Leaſe, then the Leaſe to be to the Diſcoverer, he Covenanting as followeth; But if both ſhall refuſe, or forbear to work through diſability or unskilfulneſs, then the Corporation will reward the Diſcoverer, according to the Nature of the Mine, whether he be Proprietor or otherwiſe.

3. If any Farmer or Poſſeſſor diſcover a *Mine Royal* which hath been wrought otherwiſe then as a *Mine Royal*, he ſhall be proceeded with according to the ſecond Rule.

4. If any other perſon, being neither Owner, Poſſeſſor, nor Farmer, ſhall diſcover a *Mine Royal* in another mans ground, he ſhall be proceeded with according to the ſecond Rule.

5. A Diſcoverer who ſhall be capable of a Leaſe in other Mens grounds, is ſuch a perſon as ſhall be the firſt, who without fraud or Circumvention ſhall inform the Corporation of it.

6. If

6. If any perſon ſhall undertake to work a *Mine Royal*, that hath been long deſerted by reaſon of water, or other cauſes hindring the work, the Owner refuſing to work or joyne in the ſame, ſuch Undertaker ſhall have all reaſonable encouragement from the Corporation, by Leaſe or otherwiſe.

7. The Term to be granted in any Leaſe not to exceed the Term of fourty and one years.

8. The Leſſee ſhall have power to dig, &c. in as full manner as is granted by the Charter, Provided he dig not under any Caſtles, Houſes, Gardens, or Orchards, without the Proprietors conſent.

9. The Grounds and Mines to be Leaſed, ſhall not exceed one mile in Diameter, which is to be meaſured from ſuch a place as the Leſſee ſhall fix upon, and is to be deſcribed by the Town, Village, or Hamlet where it lieth, or the ſcituation or peculiar name, or diſtance from ſuch remarkable place or places, as Churches, &c. which deſcription is to be Certified by ſome Juſtices of the Peace, or the Miniſter of the Pariſh, or both, or by any of the ſworn Officers of the Corporation, or by ſuch other way as the Corporation ſhall particularly direct in that caſe; and in this allotment, care to be taken that the ſaid mile diameter do not extend or intrench upon any other Grant from the Corporation, in which caſe the Corporation will not juſtifie the Leſſees incroachments, but limit the Leaſe accordingly.

10. If the Leſſee ſhall drive a Mine into another mans Propriety without the limit of that mile, then upon that Leſſees taking of a new Leaſe, conſideration ſhall be had of the Proprietor, as the Company ſhall think fit, it being not reaſonable that he be admitted to the entire advantage of the ſecond Rule.

11. That the Fine to be paid upon every Leaſe granted, be at leaſt equal to a years rent reſerved.

HEADS of the COVENANTS *to be Contained in those Leaſes.*

1. For the Leſſees, paying the reſerved rent at the time and place appointed by two equal portions.

2. That the Leſſee ſhall covenant to diſcharge all dues to the King, and ſave the Company harmleſs, and to give an Account to the Companie when required, what metal he vendeth inward and outward, and how the Kings dues are anſwered.

3. Not to dig under any Caſtles, Houſes, Gardens, &c.

4. The Leſſee to Covenant immediatelie to ſet in hand, proceed and continue the effectual working of the Mines and Mineral work demiſed.

5. A Proviſo that the Leſſee may ſurrender his Leaſe, after ſix months advertiſement to the Company, paying all Arrears.

6. Damages for breaking ground, to be referred to ſix indifferent perſons according to the Patent.

7. That every Leſſee ſhall bring in all his Gold and Silver into the Kings Mint, or otherwiſe forfeit the ſame, or the value thereof.

8. The Leſſee to extract the Gold and Silver out of the baſe metal, as long as it conteineth ſo much of both, or either of them, as will countervail the charge of extracting, and the loſs of the baſe mettal, or elſe ſhall forfeit his Leaſe.

9. The Leſſee not to aſſign his Leaſe, or make any Leaſe out of it, without Licence from the Corporation.

10. The Leſſee at the end of the Term, or other determination, to deliver quiet poſſeſſion without prejudice to the Mine.

11. The Corporation to Covenant for quiet enjoyment againſt them, and all others claiming under them.

CHAP.

CHAP. XVIII.

Extracts out of CAMBDENS BRITANNIA *concerning the Tin Mines in* Cornwall.

THE Inland Parts have rich and plenteous Mines of *Tin*; for there is digged out of them wonderful ſtore of *Tin*, yielding exceeding much profit and commodity; whereof are made Houſhold Pewter Veſſels, which are uſed throughout many parts of *Europe* in ſervice of the Table, and for their glittering Brightneſs compared unto Silver Plate. The Inhabitants do diſcover theſe Mines by certain *Tin* ſtones lying on the face of the Ground, which they call SHADD, being ſomewhat ſmooth and round. Of theſe Mines or *Tin* Works there are two kinds; the one they call *Lode Works*, the other *Steame Works*: this lieth in lower Grounds, when by Trenching they follow the Veins of *Tin*, and turn aſide now and then the Streams of Water coming in their way: that other is in higher places, whenas upon the Hills they dig very deep Pits, which they call *Shafts*, and do undermine in working: both ways there is ſeen wonderful Wit and Skill, as well in dreining Waters aſide, and reducing them into one Stream; as alſo in the underbuilding, pinning, and propping up their Pits. To paſs over with ſilence their deviſes of Breaking, Stamping, Drying, Cruſing, Waſhing, Melting, and Fining the Metal, then which there cannot be more Cunning ſhewed. There are alſo two ſorts of *Tin*; Black *Tin*, which is *Tin* Oar broken and waſhed, but not yet founded into Metal; and White *Tin*, which is moulten into Metal, and that is either ſoft *Tin*, which is beſt Merchantable, or hard *Tin*, which is leſs Merchantable. *Tin.*

That

That the Ancient *Britains* practiſed theſe Tyn-works, for *Pliny* reports, That the *Britans* fetched Tyn out of the Iſland *Ieta* in Wicker boats covered, and ſtickt about with Lether:) And *Diodorus Siculus* writes, that the *Britains* who inhabited theſe parts digged Tyn out of ſtonie ground, and at a Low-water carried the ſame in Carts to certain Iſlands adjoining, from whence Merchants tranſported it by ſhips into *Gaule*, and from thence conveied the ſame upon horſes within 30 daies unto the Spring-head of the River *Eridanus*, or elſe to the City *Narbone*, as it were to a Mart. *Ethicus* alſo inſinuateth the very ſame, and ſaith, that he delivered Rules and Precepts to theſe Tyn workers. But it ſeems, that the *Engliſh Saxons* neglected it altogether. After the coming in of the *Normans*, the Earles of *Cornwall* gathered great riches out of theſe Mines, eſpeciallie *Richard*, brother to King *Hen.* 3. and no marvel, ſince in thoſe daies *Europe* had Tynn from no other place, for the Incurſions of the Moors had ſtopped up the Tyn Mines of *Spain*; And as for the Tyn veins in *Germany*, which are in *Miſnia* and *Bohemia*, they were not as yet known, or not diſcovered before the year after Chriſts Nativitie 1240. for then, (as a Writer of that Age recordeth) was Tyn Metal found in *Germany*, by a certain *Corniſh*-man driven out of his Native ſoile, to the great loſs and hindrance of *Richard* Earl of *Cornwall*. This *Richard* began to make Ordinances for theſe Tyn-works; and afterwards *Edmund* his ſon granted a Charter, and certain Liberties, and withal preſcribed certain Laws concerning the ſame, which he ratified or ſtrengthned under his ſeale, and impoſed a Tribute or Rent upon Tyn to be anſwered to the Earles.

Lib. 6. c. 8, 9.

Po.

The Common-wealth of Tynners.

Theſe Liberties, Priviledges and Laws, King *Edw.* 3. did afterwards confirm and augment, the whole Commonwealth of thoſe Tynners and Workmen, as it were, in one bodie, he divided into four quarters, which from the places they call *Foymore*, *Blackmore*, *Irewarnyle*, and *Pen-*

Penwith; over them all He ordained a Warden called *Lord Warden of the Stannaries* of *Stannum* that is *Tin*, who are to give judgment as wel according to equity and conscience as Law, and appointed to every quarter their Stewards, who once every three weeks (every one in his several Quarter) ministers justice in Causes Personal between Tinner and Tinner, and between Tinner and Foreiner, except in Causes of Land, Life or Member, from whence there lieth an Appeal to the Lord Warden, from him to the Duke, and from him to the King in matters of moment. There are by the Warden General Parlements or several Assemblies summoned, whereunto Jurats are sent out of every Stannary, whose Constitutions do bind them. As for those who deal with *Tin*, they are of four sorts; the Owners of the Soil, the Adventurers, the Merchants or Regrators, and the Labourers called the Spadyards, (of their Spade.) The Kings of *England* and Dukes of *Cornwall* in their times have reserved to themselves a Preemption of *Tin*, as well in regard of the Propriety, as being Chief Lords or Proprietaries, as of their total Prerogative, lest the Tribute of Rent imposed should be imbezelled, and the Dukes of *Cornwall* defrauded, unto whom by the old Custom for every thousand pounds weight of *Tin* there is paid forty Shillings. It is by a Law provided, that all the *Tin* which is cast and wrought, be brought to one of the said four appointed Towns, where twice in the Year it is weighed, and signed with a Stamp (they call it Coinage) and the said Impost accordingly paid. Neither is it lawful for any man before that to sell or send it abroad, under Forfeiture of their *Tin*. And not onely *Tin* here is found, but also therewith *Gold*, and *Silver*, yea and *Diamonds* shaped and pointed Angle-wayes, smoothed also by Nature her self, whereof some are as big as Walnuts, and inferiour to the Orient Diamonds onely in blackness and hardness.

Warden of the Stannaries.

Cornish Diamonds.

Sir *John Dodderich* his History of the ancient and modern Establishment of the Dutchy of *Cornwall*, &c. is al-

most *verbatim* with what *Camden* hath writ concerning *Tin*; and both of them from *Carew's* Survey of *Cornwall*. But all the Laws concerning *Tin* are fully digested in the Lord *Coke's* 4th Report concerning the Case of the Stanaries.

CHAP. XIX.

Concerning the Laws of the Lead Mines in Derbyshire *and* Mendip *in* Somersetshire.

From the Bundle of the Exchequer, and the Inquisition of the Year of the Reign of King EDWARD *the First.* 16.

Derby. EDWARD by the Grace of God King of *England*, Lord of *Ireland*, and Duke of *Aquitain*, to the Sheriff of the County of *Derby*, Greeting: Know ye that We have assigned Our Faithful and Well-beloved *Reynold of the Ley* and *William of Memill*, to inquire by the Oaths of good and lawful men of your County, by the which the truth may best be known, of the Liberty which our Miners do claim to have in those parts, and which they have hitherto used to have, and by what means, and how and from what time, and by what Warrant: And therefore We do command thee, that a certain Day and Place which the said *Reynold* and *William* shall appoint thee, thou shalt cause to come before them so many and such good and lawful Men of thy Bailiwick, by the which the truth may there the best be known in the premisses by the Inquirie; and that thou have there the Writ. Witness Our Well-beloved Cousin *Edmund* Earl of *Cornwall* at *Westminster* the 28th. day of *April*, in the Year of Our Reign the 16th.

By

By *William of Hambleton*, and at the instance of *Hugh of Cressingham* the Day is appointed at *Ashbourne*, upon Saturday next after the Feast of the Holie Trinitie.

An Inquisition taken at Ashbourne *upon Saturday next after the Holy Trinity, in the Year of the Reign of* EDWARD *the First the 16. before* Reynold of the Ley *and* William of Meignil; *of the Liberties which the Miners of the said Soveraign Lord the King, in the* Peake, *do claim to have hitherto used, to have in those part, by what means, and how, and from what time, and by what Warrant.*

By the Oath of

Tho. Foliamb	*William of Bradl[illegible]*
Will. Hawley	*Peter of Rowlan[illegible]*
Ralph Cotterill	*Richard of Longsden*
William of Longsden	*Jur. William son of the Smith of*
John of Tearture	*Henry Foliambic* (*Bradwall*
Clement of Ford	*John of Longsden*

All Jurors.

1. Who say upon their Oaths, that in the beginning when the Miners did come to the Field seeking for a Mine, and finding a Mine, they do come to the Bailiff, which is called *Burghmaster*, and did desire (if it were a new Field) that they might have two Meers of Ground, that is to say, one for the finding thereof, and the other by the Miners Fine, *viz.* paying a mere Dish of his first Oar. *Of a new Field.*

2. And the Miners desired also in an old Work of right to be measured to the said Miners, every Meer to contain four Measures, and the hole of the Mine to be 7 feet wide or broad. *An old Work, and length of a Meer.*

That

The Length of the Measure, the King to have a 3d. Meer in a new Field.

3. And everie Measure shall be of 24 feet, and the King shall have the third Meer next the Finder, and the other two Meers shall be delivered to the Workman Finder of the new Mine by the Burghmaster.

4. And in an old Field everie Workman demanding such Work, one Meer in the Field next our Soveraign Lord the King.

The King is to have the 13th. Dish for lot.

5. And the King shall have the 13th. Dish or Measure of Oar, which is called *The Lot.*

For which cause Lot is paid.

6. And this hath been used, and for this our Sovereign Lord the King shall find unto the Miners free ingress and egress into and from their Mines, to carrie and bear their Oar unto the Kings High way.

The King shall have Oar, giving as much as another.

7. And the Jurie do say, that they are used for coming in Mines, that our Soveraign Lord the King shall have the Buying of their Oar before all others, giving as another will.

An Exception.

8. And if the Miners have received any Monie of any other man before hand for his Oar, then the Miners shall pay their Debts without any let of Burghmaster, so that this be without fraud or deceit, or else the King shall have the Oar before all others.

Miners may lawfully sell their Meer at pleasure.

9. And the Jurie say further upon their Oaths, that it is and shall be lawful to the Miners to sell, give and assign his Grove or Meer of ground, or any part thereof, without the License of the King or Burghmaster.

An Exception.

10. And this hath been used time out of memorie of man in all the Territories and Liberties of the *High Peak* unto this time, save in a certain place there called *Man Dale*, in which place all Buyers of Oar are prohibited to buy Oar by the space of 4 Years last past by the Burghmaster.

Courts of the Burghmaster to be kept every 3 Weeks.

11. And for what cause the Miners may maintain their Right and Customs above the said Jurie do say, that the ancient Custom of the Mine is, that the Pleas or Courts of the Burghmaster ought of right to be kept and holden Yearlie upon the Mines from 3 Weeks to 3 Weeks.

12. And

And the Jurie ſay upon their Oaths, that if any Miner be ſlain by any misfortune, that ſuch Miner be buried (without the view of the Coroners of the ſaid Countie) by the view of Miners. *Coroner of the County not to view the Body of any Miner.*

And if any perſon or perſons be convicted of any ſmall Treſpaſs, he ought to pay for his Amercement a *d.* and that to be the ſame day paid, or elſe to double the ſame Amercement till it come to 5 *s.* 4 *d.* *Tenth Fine for ſmall Treſpaſſes.*

If any bloud be ſhed upon the Mine, the Author ſhall pay 5 *s.* 4 *d.* the ſame day, or elſe ſhall double the ſame every day till it come to 100 *s.* *Every Bloudſhed* 5 *s.* 4 *d.*

And if any Miner do any Treſpaſs under the ground to his Fellow, he ſhall pay for his Amercement 5 *s.* 4 *d.* and ſatisfie his Fellow the full value of his Treſpaſs.

FINIS.

In Nomine Dei, Amen.

Firſt time that the New Mine was found, the Merchant and the Miners choſe them a Burghmaſter, for to deliver unto the Finder of the Mine two Meers, and the Lord of the Field a Meer near to the ſaid two Meers on the one partie; or elſe half a Meer on the one ſide of the ſaid Meer, and another half on the other ſide, at his own election: and after that the Burghmaſter ſhall deliver to the Miners Meers to work after the Law of the Mine. *Of a new Field.* *The Lord of the Field to have a new Meer.*

THE LIBERTIES AND CUSTOMS.

A Meer of Ground which in length.

And a Meer shall contain in length 10 wands and 7 feet, that is to say 87 feet there alway as the Mine goeth between two Coals, and the Miners shall have their Meers to them and their Heirs for ever: but if they be forfeited by the Law of the Mine to the Lord, their Wives shall have Dowers in the said Meers: but if they be forfeit, they are as aforesaid.

Wives to have Dowers in Meers.

How the Work to be followed.

And the Miners shall work their Meers duly, and shall chuse their Stool on that one part there as he may find Mine between two Walls, in the natural way till he come to the Meer Stake, and then his Neighbours next him shall chuse the Stool in the same manner, and so the Stool shall be closed from Meer to Meer, but if it be letted by Water.

For letting by Water.

The Burghmaster is to score the Spindle of the Stool, Where it is not rightly wrought.

And then the Burghmaster shall see that the Mine be wrought duly, and where he findeth a Meer unwrought, he shall score on the Spindle one score, and so from week to week he shall visit the Field, and see that the Mines be wrought.

And if he find any Meer standing unwrought 3 weeks together, he shall score three scores on the Spindle, and deliver it to him that will work it as the Law will; but if it be borrowed and replevied, as the Law of the Mine will at the 3 weeks end.

Concerning Measures.

And then the Lords and the Miners shall ordain them a conveniable Measure by which the Lord shall receive his Lot, and the Miners shall sell their Mine.

And the Miner abiding upon his Meer shall have delivered to him by his Burghmaster a sufficient place for his Lodge, and for his Cottage, with sufficient House-boot and Hay-boot, and all manner of Timber for their Groves delivered by the Lords, or by his Fosters (if they have

have ſufficient within their Lordſhips) elſe the Miners ſhall buy them at their own proper coſt in other Lordſhips, and then the Lord ſhall take Lot, and then it ſhall be lawful for them to carrie their Mine whitherſoever them liſt, and burn it, and do with it what them likes beſt, without diſturbance of the Lord, or any of his Officers.

Miner and Merchant toll-free.

And the Miners and Merchants of the ſaid Mine ſhall be quit of all Damages and all other Cuſtoms, as far as the Lordſhip laſteth, and in all places as the Lord may ſpend Four Pence by the Year.

Miners to have Paſture in the Lords Waſte.

Not to pound the Cattel of Miners.

And the Miners ſhall have for their Beaſts Paſturing with the Lords Beaſts in his Waſtes, except his fenced Parks, Medows, and ſowen Fields; and then no Miniſter of the Lords ſhall pin them nor diſtrain them for no Article of the Mine within the Franchiſe of the Mine, but onely the Burghmaſter and the Lord.

Courts to be kept.

Alſo the Stewards ſhall hold Yearly on the Mines at their own wills Courts, and two Great Courts every Year; and if any Miner or other perſon be Attaint for ſtealing of Barmine, firſt he ſhall be amerced in it 5 *s.* 4 *d.* the which 4 *d.* the Burghmaſter ſhall have; and if he be Attainted again, the Miner ſhall be amerced in 10 *s.* 8 *d.* the which 8 *d.* the Burghmaſter ſhall have; and if he be Attainted the third time for ſtealing of Mine, he ſhall be taken and ſtricken through the Right Hand in the Palm with a Knife up to the Heft into the Stow, and there he ſhall ſtand till he be dead, or elſe cut himſelf looſe, and then he ſhall forſwear the Franchiſe of the Mine.

Office of the Steward touching Felony in the Mine.

And if any man be taken by occaſion of any Article that belongeth to the Mine, he ſhall abide in the keeping of the Burghmaſter; and if he will be Mainpriſed, the Pain ſhall be 100 *l.* to be brought again before the Steward at the next Court of the Mine; and if he that is Mainpriſed be Attainted of Felonie in the Court, the Steward ſhall do to him as the Law will upon the ſame place, if he will put him upon the Miners.

And

A Bloudshed 5 s. 4 d.

And each Treſpaſs of Oaths or Bloud ſhall be amerced at 5 *s.* 4 *d.* which 4 *d.* the Burghmaſter ſhall have.

Fines for Treſpaſs in Mines.

And every other Treſpaſs done upon the Minerie ſhall be fined at 2 *d.* and that ſhall be paid to the Burghmaſter the firſt day of Affirmment, or elſe the ſecond it ſhall be doubled, and ſo from day to day till it come to 5 *s.* 4 *d.* and then the Burghmaſter ſhall have the 4 *d.* and the Lord the 5 *s.*

Weights & Meaſures.

And the Miners and Merchants ſhall have Weights, their Lead and Meaſure for their Oar, at all times when they will, and the Miniſters to be ready at all times upon warning without let of the Lord or of his Officers.

Burghmaſter onely to do with any ſlain in the Mine.

And if it happen that the Miners or any other be dead in the Grove or elſewhere, no Eſcheator or Commoner, nor no other Officer of the Lords, ſhall meddle of Lands, Goods nor Chattels of him that is ſlain or dead by any misfortune, but onely the Burghmaſter of the Mine.

Of Lands and Chattels, of Felons and Fugitives.

And if any Felonie be done within the Franchiſe by Manſlaughter, or Fugitive of Felonie, or Theft, or Robberie, the Lands and Chattels of Felons and Fugitives ſhall be forfeited, (if they have no better grace.)

And if any Miner of his own underbeit his Neighbours Meer, that then he ſhall fill his Underbeitings with ſuch as he got out, be it pure Mine, or Bergh, or Bous, and be amerced at 5 *s.* 4 *d.* which 4 *d.* the Burghmaſter ſhall have.

Liberty for Miners in reſpect of lot & coſts.

And if any Miner or other take Coſtage of a Merchant, and may not find Mine to that Merchant, the which Merchant will make no more Coſt to find Oar in the ſame place, and after he laboureth, and findeth Mine to the profit of another Merchant after ſuch labour ſhall come, and if there be two or three, the ſaid firſt Merchant that firſt made his Coſtage ſhall have the 3d. Stone till he hath received his Coſtages, and the other Merchant ſhall have the two parts, for that the Mine was found at his Coſtages.

Alſo

Alſo the Miner and Merchant ſhall have free entrie and iſſue by all the Lordſhip to carry their Mine, and carry it whither they liſt, without let of the Lord or any of his Officers: but they ſhall give to the King for every Lord 4 *d.* for entrie and iſſue by his Lordſhip, and that is called *Cpr.* and if any Miner or Merchant died by miſadventure under the Earth, or be ſlain by Chance-medley, the Burghmaſter ſhall ſee his bodie as Coroner, and let his bodie be buried without any other Coroner. *Which due to be paid for Cope.* *Burghmaſter Coroner for the Mine.*

And the Miners ſhall have for their lot and Copr. ſufficient Timber for their Work (without any Penie giving) of the next Founder within the Kings Lordſhip. *Grove Timber.*

Alſo they ſhall have Water to waſh their Mine without any let for the ſaid Lot and Copr. *Water.*

And if the Lord will buy their Mine for as much as any other man will give them, he ſhall have their Mine before all other men; and if he will not, they ſhall ſell their Mine where they will to their moſt profit, without impeachment of diſturbance of the Lord, or any of his Miniſters. In witneſs whereof, &c. *The Lord to have Preemption of the Miners Oar.*

Theſe been the Laws aud Cuſtoms of the Mine uſed in the higheſt *Peak*, and in all other places through *England* and *Wales*, for the which to be had the wiſe Miners ſued to our Lord the King that He would confirm them by His Charter under His Great Seal in way of Charitie.

And for his Profit, foraſmuch as the aforeſaid Miners be at all times in peril of their Death, and that they have nothing in certain, but that which God of his Grace will ſend them.

FINIS.

WILLIAM DEBANCKE.

CUR. MAGNA BARMOT.

TENT. APUD WWKSWORTH CORAM FRANCISCO Com. Salop. 20 die Septembris, Anno Regni EDWARDI VI. &c. Tertio.

Inquiſitio Magna pro Domino Rege Miner. infra Wapentag. prædict. per Sacramen.

Jurors.	*Jurors.*
Nicholas Hides	*William Bennitt*
Robert Cotten	*Tho. Steepld*
Edri. Robetham	*Tho. Wood*
Hen. Storer	*James Hall*
William Leigh	*Roger Gell*
John Spencer	*John Storer*
Tho. Bramwall	*Hen. Spencer*
John Gratton	*Ralph Haughton*
John Somers	*Oliver Stotme*
Rich. Wighley	*Roger Malle*
Tho. Cockshotte	*Edw. Willie*
Tho. Woodivis	*Will. Shawe*

We do preſent and ſet down Pains for the Miners, as followeth.

Meaſure. 1: We will that the Lord of the Field ſhall make an able Diſh from this day forth between the Merchant buyer and the ſeller, and againſt every good time, as Chriſtmas and Whitſontide two able Diſhes, upon pain of every time wanting if it be called for, to forfeit for every time 3 *s.* 4 *d.* to the King.

2. That

2. That the Lord of the Field, Deputie, and the Burgh-maſter or his Deputie, ſhall go every week once or twice over the Fields, and where they find any Ground wrought wrongfully by any man, contrary to the right and cuſtom of the Mine, then they ſhall take them up untill ſuch time as the Law of the *Barmote* hath determined it, or elſe the Burghmaſter or his Deputie (according to the old cuſtom) ſhall put 4 or 6 honeſt men among the 24, that they may have the hearing of the matter between the Parties, for to ſet an Order for the ſame Ground ſo wrought wrongfully, that the Field be not ſtopped. *For Ground not juſtly wrought.*

And whoſoever diſobeyeth this Article, to forfeit for every time ſo doing 3 *s.* 4 *d.* or elſe to go to the Stocks if he be a light perſon, and the 24 Miners ſhall aid the Officers in ſo doing, according to the old cuſtom of the Mine.

3. Alſo that the Burghmaſter or his Deputie ſhall able us the next way to the Kings High-way to the water with Oar, if any man ſtop us, according to the cuſtom of the Mine.

4. Alſo if there be any poor man that hath any Oar under a Load to meet, and give the Burghmaſter warning according to the cuſtom of the Mine, and cannot have the Diſh, then it ſhall be lawful for ſuch poor men to take two honeſt Neighbours, and deliver his Oar to whom it pleaſeth him, paying the Church and the King their Duties.

5. Alſo if the Burghmaſter attach any Oar (or his Deputie) which is ſtollen, he ſhall attach the Seller thereof, that he might have the Law of the Mine, according to the Charter. *Oar-ſtealers.*

6. Alſo if there be any man that maketh any Title to any mans Ground contrary to Right, and it be tried by the Law, he that is caſt ſhall pay two Shillings for the twelve mens Dinners; and if he will not pay it, then the Burghmaſter ſhall take ſo much Oar of him as co-meth *Trials for Grounds in variance.*

meth to two Shillings or elſe ſome other Diſtreſs if he be worth ſo much.

Not to be amerced. 7. Alſo that no Miner ſhall be amerced by the Burhmaſter without lawful Warning.

8. That no man ſhall mete without the Kings Diſh; for if he do, and be ſo taken, if it be above a Load of Oar, the Lord of the Field ſhall have it; and if it be under a Load, the Burghmaſter ſhall have it, if it be taken meting beſides the Diſh, if he do not call for the Kings accordingly.

Concerning Oar debt. 9. Alſo that no man ſhall ſue any Miners for any Oar Debt forth of the Barmote Court; nor no Officer ſhall ſerve a Writ nor Warrant upon any Miner when he is at his Work upon the Mine, nor when the Miner cometh to the great Leets of the Barmote, but the Burghmaſter or his Deputies; and if any man ſue for Oar Debt forth of the Barmote Court, he ſhall loſe the Debt, and pay the Coſts.

How the Courts ought to be kept. 10. Alſo the Burghmaſter ſhall keep two great Courts every Year, and if need be or require, every third Week a Court, upon pain of 3 *s.* 4 *d.*

If a new Field be found. 11. Alſo if any Miners by the Grace of God find any new Rake or Vein, the firſt Finder ſhall have two Meers, and the next Meer after the Burghmaſter ſhall have for the King, according to the old Cuſtom of the Mine, and every taker after but one Meer; and ſo the Field to be occupied according to the Right and Cuſtom.

Why Lot Paid. 12. Alſo by the old Cuſtom Miners ought to have Wood of the Kings Woods to ſtow and timber their Groves under the Earth and above; and therefore they pay lot to the King, for which they ought to have ſufficient off the King's Grounds that is next thereto.

13. Alſo if there be any man ſlain or murthered upon the Mine upon any Grove, neither Eſcheator or Coroner, nor any other Officer, ſhall meddle therewith, but only the Burghmaſter.

14 Alſo

14. Alſo all new Grounds, as Croſſes and Holes that be not ſtowed nor yoked lawfully, from the firſt day of *July*, or within three weeks and a day next after enſuing, that then it ſhall be lawful for any man to take them and work them lawfully. And no Croſſes nor Holes ſhall ſtand no longer then a man may go home and fetch his Tools to work with, and Timber to ſtow with; and the furtheſt Day ſo ſtanding to be 3 days, and after the 3d. day any Croſs or Hole ſhall be lawful for any man to work them lawfully. *How long Croſſes and Holes ſhall hold Poſſeſſion.*

15. Alſo we ſay, that the Burghmaſter ſhall not meaſure any mans Ground untill ſuch time as the Mine hath Oar gotten within the ſame Ground to free it with, or elſe it ſhall not be meaſured. *A Ground meaſured freed by the Oar there gotten.*

16. Alſo that no Merchant buyer of Oar ſhall touch the Kings Diſh, nor put his Hands therein to make his Meaſure; but the Burghmaſter or his Deputie ſhall be indifferent between the Merchant buyer of the Oar and the ſeller. *The buyers not to touch the Diſh.*

17. Alſo that no man that is a Workman, that doth work his Ground truly, there ſhall no man come to claim his Ground, and take him up to ſtop the Field: but the firſt Workman ſhall work, and the Claimer take the Law, and the Burghmaſter ſhall do him the Law truly. *Her Impoſition to work; Claimer take his courſe by Law.*

18. Alſo no Barmer, nor any other Deputie, ſhall keep no Counterfeit Diſh nor Gages in their Cows nor Houſes; but every man ſhall buy by the Kings Diſh, and no other Diſh uſed, upon pain for every other Diſh or Gage ſo known or taken, to forfeit for every time 6 *s.* 8 *d.* and the ſeller to forfeit his Oar. *Gage and Counterfeit Diſhes being kept.*

19. And if any Gentleman or other man have any Ground lying in the Mine called *The Kings Field of the Mine*, they ſhall keep them lawfully with Stows and Timber openly in all mens ſight between this and *Michaelmas* next to come, or elſe it ſhall be lawful for any man to take and work them for their own. *Touching Gentlemen and other mens Groves unwrought.*

Againſt Maintainance touching Groves in variance.

20. Alſo we lay a Pain, that no perſon ſhall at any time from henceforth go to any Gentleman or other man, for to give or ſell any Groves or Grounds in variance for Maintainance, and every perſon ſo doing to loſe his ſaid Grove or Grounds, and the taker of any ſuch Groves in variance as aforeſaid, to forfeit 10 *l.* to the King.

Meaſured by Counterfeit Meaſures.

21. Alſo if any perſon or perſons from henceforth do make any Gage, or counterfeit the Kings Meaſure to mete Oar with, if it be a Lord, every ſuch perſon or perſons ſo taken ſhall forfeit every time 10 *l.* and his Oar to the King.

CUR. MAGNA BARMOT.

DOM. REGIS & DOM. REGINÆ, TENT. APUD WRICKSWORTH 3 Maii, Annis Regni PHILIPPI & MARIÆ, Dei Gratia Regis & Reginæ Angliæ, Hiſpanniæ, Franciæ, &c. tertio & quarto.

Inquiſitio Magna pro Domino Rege & Domina Regina pro Miner. infra Wapentag. prædict. ſecund. conſuetud. ibidem uſitat. per Sacramen.

Jurors.	*Jurors.*
Rud. Cadwan	*John Wright*
Hen. Smith	*Mich. Keigh Holm*
Rich. Winfield	*Laurence Supper*
Hen. Spencer	*Roger Marlee*
Will. Sands	*Roger Tippinge.*
Rich. Hilton	*Rich. Wigſey*
Rob. Alleynſea	*John Norman*
Hen. Mycock	*Will. Rebotham*
John Steeple	*Tho. Wood*
Will. Ballance	*Tho. Needham*
Tho. Bennet	*John Pickocke*
Thomas	*Tho. Jones*

1. We

1. We will the Lord of the Field ſhall make for us and all other Miners an able Diſh from this time forth, between the Merchant buyer and the Merchant ſeller of Oar, and againſt everie Good time, as Chriſtmaſs, Eaſter, and Whitſontide two able Diſhes, if need ſhall require, if they be called for, upon pain for everie time not ſo doing to forfeit 3 *s.* 4 *d.* *Lord of the Field to provide able Diſhes.*

2. Alſo we tax a Pain, that whereas everie man that hath a Waſhing Trough of his own by the cuſtom of the Mine, ought to have the ſpace of 7 feet about the ſaid Waſhing Trough, that if any perſon ſhall dig, delve, or ſhovel nigh upon the ſaid Trough within the ſaid ſpace, ſhall forfeit ſo oft as they ſhall ſo do 4 *d.* *Not to dig or ſhovel within 7 feet of any mans Waſhing Trough.*

3 Alſo we lay a Pain, that no perſon or perſons ſhall purchaſe any Oar in any mans Ground, (but in their own onely except) that the Owners be upon the Ground, upon pain to forfeit the Oar to the Owners of every ſuch Ground, and 6 *d.* to the King and Queen ſo oft as they ſhall be taken therewith. *A Pain touching Purchaſors.*

4. Alſo that no perſon ſhall dig, delve, or ſhovel at or about any mans being place, upon pain to forfeit for every time 12 *d.* *Not to dig, &c. near any mans being place.*

5. Alſo that no Purchaſors ſhall let or ſtop any Miners from any Waſh trough at any time, upon pain for every Offence to forfeit 12 *d.* *Miners not ſtopped from Waſh-troughs.*

6. Alſo we preſent and ſay upon our Oaths, that the cuſtom of the Mines within the Wappentake of *Wrickſworth* is ſuch, that if there be any poor Miner or other perſon that hath Oar to be moulten under one Load, if the Barmers have thereof notice, and will not come to the meaſure theareof upon reaſonable requeſt and warning to him made and given, then every ſuch poor man may lawfully take two Neighbours, and deliver his Oar to whom he will, ſo that the Church, the King and Queen have their due lawful Duties for the ſame. *Barmers to meaſure poor mens Oar.*

7. Alſo that no perſon ſhall deliver any Oar beſides the King and Queens Meaſure called *The Diſh*, without licence *None to deliver Oar beſides the Kings Diſh.*

cence of the Barmer or his Deputie, upon pain to forfeit for every time 2 *s.*

4 s. allowed for 12 mens Dinners.

8. Alſo if any Action be commenced in the ſaid Court of Barmote by any perſon againſt any man for any Grounds in variance, whoſoever ſhall be condemned by Verdict of 12 Men or otherwiſe, or if a Pannel be ſummoned, and thereupon do appear, and be ſworn to try the Iſſue, if the Plaintiff will not follow the Suit, or if the Plaintiff for his unjuſt Suit, or the Defendant for the unjuſt defence of his unlawful Title, ſhall be condemned, he ſhall pay 4 *s.* for the 12 Mens Dinners, and the Barmer to lay forth the Monie, and he to levie the ſame againſt the partie condemned.

No Miners amerced without lawful Summons.

9. Alſo that no Miner ſhall be amerced by the Steward of the Court of Barmote without lawful Summons or Warning, upon pain for everie time 4 *s.* and the Burghmaſter to pay *amerciamenta*.

A Pain againſt Purloiners.

10. Alſo we lay a pain, that if any perſon or perſons take away at any time any Stows, Timber, Picke, or any other things concerning the occupation of the Mine from any mans Ground or Cows, ſhall forfeit for every time 5 *s.* whereof 20 *d.* to the King and Queen, and 3 *s.* 4 *d.* to the partie grieved.

Holes and Croſſes hold not poſſeſſion above 3 days.

11. Alſo we ſay upon our Oaths, that all Grounds, as Croſſes and Holes that be not ſtowed nor yoked lawfully, from henceforth within 3 weeks and 1 day, that then it may be lawful for any perſon or perſons to take them, and work them lawfully; and no Croſs nor Hole ſhall ſtand nor prevail any longer time then a Man may go home, and fetch his Tools to work withall, and Timber to ſtow with; and the furthermoſt day to be 3 days, and after the third day, then every ſuch Croſs or Hole ſhall be lawful for all men to work them to their moſt profit and advantage.

Wood and Water allowed by the King.

12. Alſo we ſay upon our Oaths, that all Miners within the Wapentake of *Wricksworth* ought to have by cuſtom the freedom there of the next Wood, and Water of the Kings

Kings and Queens to ſtow and timber their Grounds under the Earth and above, and therefore the Miners do pay Lot to the King and Queen.

13. Alſo the Barmer ſhall able the Miners the next way lying to the High-way to the water (if they be ſtopped) upon pain for everie time 12 *d.* *Barmer to ſet a way neareſt the water.*

14. Alſo we do preſent, and upon our Oaths we do ſay, that it is lawful for all the King and Queens Liege people to dig, delve, ſearch, ſubvert, and turn up all manner of Grounds, Lands, Medows, Cloſures, Paſtures, Moors, and Mariſhes for Oar Mine, within the aid Wappentake of *Wirkſworth*, of whatſoever Inheritance or Poſſeſſion the ſame be: but if any Arable Grounds or Medows be digged, delved, or ſubverted for Oar Mine by any perſon, not wrought lawfully according to the cuſtom of the Mine, that then it may be lawful to the Inheritors or Poſſeſſors of all ſuch Arable Grounds and Medows onely ſo digged and delved, and ſubverted or mined, the ſame to fill up again at their own wills and pleaſure. *Miners Privilege places to work in.*

15. As alſo we do preſent and ſay upon our Oaths, that the cuſtom of the ſaid Mine is; that if any Miner be amerced at the Court of Barmote the firſt time is (and ſo at every Court if ſuch occaſion enſue) to double the ſame untill it ſhall amount to 5 *s.* 4 *d.* whereof 5 *s.* to the King and Queen, and 4 *d.* to the Burghmaſter. *Wherein a Miner is amerced.*

16. Alſo we do preſent and ſay upon our Oaths, that the cuſtom of the ſaid Mine is ſuch, that no perſon ought to ſue any Miner for Oar Debt, or for Oar, or for any Ground in variance, but onely in the ſaid Court of Barmote; and if any do to the contrarie, they ſhall loſe their Debt, and pay the Charges in Law; and that no Officer ſhall execute any Writ, Warrant, or Precept upon any Miner being at his Work upon the Mine, nor when the Miners ſhall come to the great Courts of Barmote, but only the Barmer or his Deputie. *Barmote the onely Court to be ſued in.*

None to keep any Counterfeit Measure.

17. Also that no person or persons shall buy Oar at any times, lawfully or unlawfully meten, but the same to be done openly by the King and Queens Measure called *The Dish*, upon the Pain for every time so offending and taken therewith to forfeit 10 *s.* the seller thereof the Oar.

18 We also lay a Pain, that no person or persons from henceforth shall keep any Dish or Counterfeit Measure in their Houses, Cows, or in any other place; and that everie person shall buy and sell their Oar by the Kings Dish, and none other to be had or used amongst them; and everie buyer so offending and taken therewith for everie time to forfeit 10 *s.* and the seller to forfeit the Oar by any such unlawful Measure so bought or sold.

Keeping Courts.

19. Also that the Barmaster shall keep two great Courts of Barmote Yearlie, at or about the Feasts of *Pasch* and *S. Michael* the Archangel, and everie Week a small Court, as need shall require, upon pain for everie default 4 *s.* 4 *d.*

Custom of finding a new Vein.

20. Also our Custom is such, that if any Miner by the grace of God do find any new Rake or Vein, the first Finder ought to have two Measures, and the Barmaster ought to have the next Measure thereunto, for the King and Queen, according to the Custom of the Mine; and everie one after so far as the said Rake will contain.

Barmer instead of a Coroner.

21. Also if it fortune or happen that any Miner be slain, killed, murthered, or damped upon the Mine within any Grove, neither Escheator, Coroner, nor other Officer ought to meddle thereupon, but the Barmaster or his Deputie.

Not to measure Ground before freed.

22. Also the Barmaster shall not mete or measure any mans Ground, until such time as there shall be Oar gotten within the same Ground, and that when they free it it shall be meaten.

Not to touch the Dish.

23. Also that the Merchant buyer of the Oar shall not touch the Kings Dish or Measure, nor put his Hand therein to the intent to make his Measure; but the Barmaster

ſter or his Deputie ſhall be indifferent betwixt the Merchant buyer and ſeller.

24. Alſo that no Workman ſhall come to any Workman, that doth work his Ground trulie, by any colour to claim his Ground, or take him up to ſtop the Field of the Mine, but the firſt Workman ſhall work, and the Claimer take the Law, and the Barmer ſhall do him Law. *Againſt ſtopping the Field.*

25. Alſo if there be any Gentleman that hath any Grounds in the Mine called *The Kings Field of the Mine*, they ſhall keep them in occupation with Stows and Timber in all mens ſight, or elſe it ſhall be lawful for any man to work them as their own to their moſt profit and advantage. *Keeping Grounds without Stows or Timber*

26. Alſo we lay a Pain, that no perſon or perſons ſhall go to any Gentleman or other man to give or ſell any Ground or Groves in variance for Maintainance in pawn, for everie man ſo doing to forfeit the ſaid Grounds or Groves, and the taker of them to forfeit 10 *l.* *No perſon to ſell Grounds in variance.*

27. Alſo if any perſon or perſons from henceforth do make any Gage or Counterfeit Meaſure to mete any Oar with, if it be above a Load, that then everie ſuch perſon or perſons ſo taken ſhall forfeit 40 *s.* and if it be a Load or under a Load, the Barmaſter ought to have the Oar. *Againſt any Counterfeit Meaſure.*

28. Alſo we lay a Pain according to our cuſtom, that no perſons ſhall bring any unlawful Weapons to the Mine, for everie time 3 *s.* 4 *d.* and if any make an Aſſault or an Affray upon the Mine, everie ſuch perſon is 10 *l.* and everie bloud maliciouſlie ſhed againſt the King and Queens Peace is 100 *s.* *Againſt unlawful weapons.*

29. Alſo we ſay upon our Oaths, that the cuſtom of the Mine is ſuch, that if any perſon or perſons will make any Title in or to any Grounds, Groves, Shafts, or Rakes, Veins or Meers of Groves or Oar, ought to arreſt the ſame according to the old cuſtom of the Mine, and the Defendants ought to be bound in ſufficient boud, with ſufficient *Groves or Meer in variance.*

ſufficient Sureties with him to the Plaintiff or Claimers, not onely to make anſwer at the next Court of the Barmote to ſuch Actions or Accounts as ſhall be attempted by the Plaintiff or Claimers upon the ſaid Arreſtment, but alſo to yield ſo much Oar, or the value thereof, to the Plaintiff, if the Defendant be caſt or condemned by Verdict of 12 Men or otherwiſe. And furthermore we do Order in the premiſſes, that after ſuch Arreſtment made, the Barmer ſhall appoint a Court of Barmote within 10 daies, or elſe as ſhortlie after as he can convenienlie, and if the Plaintiff do not follow and purſue his Suit upon the ſaid Arreſtment, then he to loſe to the Barmer 6 *s.* 8 *d.* and to loſe his Suit alſo, ſo the Barmer keep a Court, as is aforeſaid; and if the Barmer do not keep a Court, upon requeſt to him to be made, then is he to forfeit for everie Court not kept 10 *s.*

Stealing of Oar.

30. Alſo we do preſent and ſay upon our Oaths, that any perſon or perſons do ſteal or felloniouſlie take away any Oar from any Grounds, Groves, Cows, Houſes, Boles, or Bolſteds, if it be under the value of 13 *d. ob.* then the Barmer ſhall puniſh ſuch Offenders in the Stocks, Pillorie, or otherwiſe, as is fit for ſuch Offenders to be puniſhed; and if any Oar be ſtollen above the value of 13 *d. ob.* we ſay it is Fellonie; notwithſtanding any ſurmiſed, feigned, or imagined Cuſtoms amongſt us uſed to the contrarie; and that all ſuch perſons receiving, aiding, helping, or comforting ſuch Offenders, knowing them to have committed ſuch Offences or Felonies be Acceſſorie to the ſame.

Barmaſter or Deputy walking in the Fields.

31. Alſo if there be any Miners which do work in any Meer, Grove, Shaft, Vein, Rake, or Grounds according to the cuſtome of the Mine aforeſaid, for that we do lay a pain that no perſon or perſons at any time or times, neither by day nor night, ſhall caſt in any of the ſaid Grounds, howſoever they ſhall be wrought, upon pain for everie offence, ten pounds, for if any grounds be not wrought lawfullie, there is a Law for reformation to be had in ſuch caſes provided.

Nine to caſt in any mans Ground.

32. Alſo

32. Alſo we will that the Lord of the Field or his Deputie, and the Barmaſter or his Deputie, ſhall go once a week once or twice over the Field; and where they find any of theſe Articles not done, or any that do offend in any of them, they ſhall do their diligence to reform the ſame. And if any of theſe Pains be broken or forfeited, they ſhall endeavour themſelves and inquire thereof, and preſent the Offenders and Offences at the Great Court of Barmote from time to time.

33. Alſo we do lay a Pain, that no perſon or perſons ſhall from henceforth Cave in any mans Grounds or elſewhere, upon pain to forfeit the Oar to them that will take the ſame from the Cavers, and they to forfeit for everie Offence to the King 6 *d.* *Againſt Cavers.*

FINIS.

AN ABSTRACT OF THE CIVIL LAWS Concerning Metalliſts, Metallick Artiſts, Alchemiſts, Metalls, and Monie.

DE METALLARIIS.

Metallarius quilibet eſſe poteſt.
Metallarii poſſunt eſſe Laici & Religioſi.
Metallarii pro in roi u debent ſolvere Fiſco tertiam partem unciæ pro foſſione libram annuam: 14 unciarum pro purificatione, duas decimas Fiſco ſi fodit in publico, unam ſi in privato.
Sed de auro ſolvere tantùm debent 7 ſcrupulos annuos.
Prævalet tamen conſuetudo.
Si deſeruerint artem, poſſunt compelli ad illam reaſſumendam, quacunque Præſcriptione non obſtante.
Ita poſſunt retrahi ad officium filii Metallariorum.
Etiamſi fuerint in ſervitio Principis.

Quilibet in proprio ſundo metalla poteſt inquirere, dummodo Fiſco partem debitam ſolvat.

In fundo uſufructuario ſimiliter inquirere poteſt, niſi partem fundi lædat, vel formam mutet, vel aerem corrumpat, vel ſumptum magnum proprietario afferat.

Ita poterit in fundo Emphyteotico.

Et in ſundo Feudali.

Et in Dotali.

In fundo Communi poteſt inquiri invito Socio, ſi prædium ſit ad hoc deſtinatum, vel aliqua pars, & ſocio damnum non inferatur.

Socius poteſt incidere ſylvam cæduam, invito ſocio, nè pertinacia unius altero noceat.

Ad Metalla inquirenda vel effodienda ſocietas coiri poteſt.

In ſolo publico Metalla inquiri poſſunt.

Et in ſolo alieno volente domino.

Et invito domino ob publicam utilitatem.

Dummodo non inferatur præjudicium domino.

Incipiens inquirere vel fodere in ſuo, ſi vena tranſit in alienum, poteſt eam proſequi domino invito, dummodo fiat ſine ipſius detrimento.

Vel nolet ipſe dominus initio inquirere & fodere.

Niſi extraneus jam reperierit, vel expenſas in fodiendo fecerit.

De Artificibus Metallorum.

Artifex alicujus artis dicitur, qui ejus artis habet ſcientiam

Ementes, & Vendentes, & Negotiatores, non veniunt ſub nomine Artificum.

Ad probandam peritiam Artificis opus eſt teſtibus in arte peritis.

Artifices puniuntur, ſi non juſtè & ſine fraude artes ſuas exercent.

Aurifex faciens aurum minoris Ligæ punitur pœna falſi.

Aurifex vendens rem vitioſam ſcienter, tenetur ad totum intereſſe; ſi ignorans, tenetur ad quanto minoris emptura fuiſſet.

Ars

Artifices ſunt immunes à publicis muneribus perſonalibus.
Artifex ad hoc, ut gaudeat immunitate, Matriculæ quinque requiſita habere debet.
Deſcriptus in Matricula.
Peritus in illa arte.
Exercens illam artem.
Per ſe, non per alios.
Bonam partem fortunarum ſuarum in illa arte poſitam.
Diſcipuli non gaudent privilegiis artificum, ſed in teſtamentis & beneficiis gaudent.
Artifex deſerens artem per decennium deſinit eſſe Artifex.
Artifex conſuetus obedire alicui Magiſtratui, non libratur niſi deſuetudine legitima in contrarium.
Artifex qui deſeruit artem poteſt convenii ante ſuperiorem, artis in his quæ ad artis exercitium pertinent.
Hæres artificis coram Judice defuncti, prorebus artis eſt conveniendus
Duas artes exercens ambarum privilegiis gaudet.

De Alchemistis.

Species una Metalli in aliam mutari poteſt.
Aurum vel Argentum Alchemicum habet verum & proprium Auri vel Argenti ſubſtantiam, ſophiſticatum habet colorem, & apparentiam tantum.
Alchemicum verum à naturali non differt.
Alchemicum pro naturali ſolvi poteſt, ſophiſticatum non poteſt.
Re in totum ſophiſticoëta vendita, non valet venditio.
In partem ſophiſticata valet, in ea parte in qua non eſt error actum.
Error in materia vel qualitate ſubſtantiali non vitiat actum, ſed in qualibet inviſibili vitiat.
In diſtractu & liberatione error vitiat actum, ut ænea ſolutio pro debito aureo.
In depoſito non vitiat.
Neque in pignore.

Emens

Ementis æs pro auro, ignorans, habet actionem adversus venditorem, sciens non habet.

Si ignarus vendidit, & datur actio ex empto; si scienter actio de dolo.

Alchemista si vendit sophisticatum pro vero, non potest esse testis; si post purificato potest.

De Metallis.

Aurum, vel Argentum, vel aliud quodcunque à flumine prædio meo adjectum & terræ cohærens, meum fit.

Quod præcedit si dominus ignoretur.

Venæ Metallorum ignotæ sunt in dominio domini fundi.

Venæ quæ sunt in fundo Fisci vel Principis, ad Fiscum vel Principem spectant.

Quæ sunt in fundo Universitatis, sunt ipsius Universitatis.

Quæ in fundo Ecclesiæ sunt Ecclesiæ.

Quæ sunt in fundo privatorum, ad privatos pertinent, non ad Fiscum.

Quæ in fundo Emphyteotico ad Emphyteotam non ad dominum directum.

Quæ in fundo Feudali ad Feudatarium

Quæ in fundo usufructuarii ad usufructuarium.

Quæ in fundo Dotali, si renascantur, ut auri fodinæ sunt Mariti, si non renascantur, ut lapides, sunt uxoris.

Expensas in fundo Dotali factas à Marito pro inveniendis fodinis, si sunt ad perpetuam utilitatem rei maritus repetere potest; si sunt ad fructus quærendos vel colligendos, non repetit sed compensantur cum fructibus.

Si mulier impediat maritum fodinarum usum, & impensa facta sit gratia fructuum, datur marito actio ad exhibendum, si gratia rei, datur actio de Dole contraria.

Metalla qui invenit in fundo alieno, decimam unam debet domino fundi, alias Fisco vel Principi, reliqua sibi acquirit.

Incipiens fodere in suo fundo, & per cuniculos transit in alienum, & ibi Metallum invenit, sibi venam acquirit, non domino fundi.

Et

Et retinens cuniculum apertum, acquirit jus in tota vena, licèt fodiat in una parte tantum.

Dominus fundi ſciens & patiens aliquem fodere in ſua vena ſpatio 30 annorum, amittit jus ſuum.

Commoditas vel jus fodiendi ſervitus eſt perſonalis, non realis.

Dominus venæ præſumitur is qui repertus eſt poſſeſſor boſtii cuniculi.

In dubio poſſeſſionis Judex debet ſummariè ſe informare, & poſſeſſionem manu tenere.

Fundo vendito venæ fundi omnes cenſentur venditæ.

Venis in venditione exceptis, extantes eo tempore, intelliguntur non poſtea inventæ.

Nondum inventæ in venditione reſervari poſſunt.

Vena inventa in fundo diviſo, ſpectat ad eum cui fundus obtigit in diviſione.

Caſtrum ſi Princeps concedat cum fodinis ſuas fodinas concedit non privatorum.

Pupillus fodinas alienare nequit.

De Moneta.

Monetam cudere ſolus de jure poteſt Imperator.

Vel is qui ab ipſo Licentiam habet.

Expenſis Debitoris & Creditoris talis æſtimator ſolvi debet.

Auri pretium augeri vel minui poteſt à Principe vel Authoritatem cudendi habente.

Pro valore currenti quilibet accipere tenetur.

Duabus monetis in Civitate currentibus, debitor eligere poteſt ad ſolvendum quam volet, niſi aliter pactum ſit.

Pro debito auri vel argenti, in maſſa, non poteſt ſolvi pecunia, niſi ſit ejuſdem probitatis, ponderis & ligæ.

Debitum expreſſe quantitatis & monetæ veluti librarum 100 in Florens, debet ſolvi in quantitate 100 librarum, licet Florenus ſit valoris varii.

Moneta in Teſtamento relicta juxta valorem teſtamenti ſolvi debet.

Contra Campſorem agat Creditor, ſi ex ejus approbatione damnum habet.

Traditio monetæ aureæ pro argentea vel alia est contractus innominatus.

Moneta non est vendibilis neque locabilis, sed mutuabilis.

Falsa est moneta vel mistione materiæ, vel defectu nominis Principis, vel ex defectu aut civitatis in eo qui cudit.

Falsans Monetam Imperatoris incurrit in crimen Lesæ Majestatis, sed minoris Principis alterius non incurrit.

Falsans monetam auream Imperatoris cum ejus imagine comburendus est, & ejus bona confiscanda.

Non auream, vel non cum imagine Imperatoris capite plectendus & num. 100.

Tondens non cudens ultimo supplicio damnandus.

Si tonsa remaneat in suo justo valore, non punitur.

Expendens falsam stanni vel plumbi incidit in pœnam falsi, æris vero vel argenti in leviorem pœnam.

Et pœnam evadit, si doceat unde habuerit.

Vel si habens sit bonæ conditionis & famæ.

Vel si paucam monetam habeat.

Fundens monetam committit pœnam falsi.

Falsans monetam reprobatam non incidit in pœnam falsi.

Fabricans monetam sine licentia superioris, licèt non falsam, committit pœnam falsi.

Hæ & aliæ reperiuntur Leges & amplificantur in Codicibus Juris Civilis, viz. Digest. l. 3. tit. 4. leg. 1. & lib. 48. tit. 19. leg. 8. sect. 4, 5, 6, 7, 8. & Cod. l. 1. tit. 6. leg. 1, 2, 3, 4, 5, 6, 7. & Justit. lib. 2. tit. 1. sect. 39. & diversis Autoribus diligentissimè scrutatis per Joannem Guidinum Volaterranum.

An Abstract of Sir JOHN DAVIES *Report of Mixed Monies.*

Queen *Elizabeth* for Paiment of Her Armie Royal for the suppression of the Rebellion of *Tyrone*, coined in the *Tower of London* a great quantitie of Mixed Monies, with the usual Stamp and Arms of the Crown, and Inscription of the Royal Style, and sends it over into *Ireland* with Proclamation dated 24 *May*, 43 of Her Reign, whereby She declared the said Mixed Monie immediately after the Proclamation made to be Lawful and Currant Monie of the Realm of *Ireland*, and commands that the said Monies shall be so accepted, reputed, and used by all Her Subjects, and others having any Traffick within the said Realm; and if any person shall refuse to receive the same according to the Denomination and Valuation, *viz.* Shilling for Shillnigs, &c. they shall be punished as Contemners of Her Royal Prerogative and Commandment. And to the intent the said Mixed Monies might pass more freely, it was also declared by the said Proclamation, that after the 10th. day of *June* next all other former Currant Monies should be decried and annulled, and esteemed as Bullion and not Currant Monie.

In *April* before the Proclamation one *Brett* of *Drogheda* a Merchant having bought certain Wares of one *Gilbert* of *London*, became bound to the said *Gilbert* in 200 *l.* Conditioned for the paiment of 100 *l.* Currant and Lawful Monie of *England* at a certain day to come, and at a certain place in *Ireland*, which day happened to be after the said Proclamation. At the day and place *Brett* tenders the 100 *l.* in the Mixed Monie: Whether this Tender was sufficient to save the Forfeiture, and whether the said *Brett* should be compelled to pay the said 100 *l.* in the other or better Monie, was the Question at the Council Table upon the Petition of *Brett*.

And

And becauſe this was a General Caſe, and of great importance, Sir *George Carye* (being then Lord Deputie) required the Chief Judges to conſider of the Caſe, and to return their Reſolution; who upon conſideration reſolved the Tender of the ſaid 100 *l.* in Mixed Monies was good to ſave the Forfeiture, and that *Brett* ſhould not be inforced after to pay any other Monie in diſcharge of the Debt, but according to the rate and value at the time of the Tender. And this their Reſolution was certified to the Lord Deputie, and entered in the Council Book, wherein divers Points were reſolved.

1. That in everie Kingdom or Commonwealth there ought to be a certain Standard for Monie.

2. That the King of *England* is to coin the Monie in His Dominions, and none other without his Licenſe; and if any ſhall preſume to Coin, 'tis Treaſon againſt the Kings Parſon by the Common Law.

3. That the King by His Prerogative may make Monie of what matter and form he pleaſe, and eſtabliſh the Standard thereof; and may change His Monie in Subſtance and Impreſſion, and enhaunſe or abaſe the Value, or decry and annul it, and make it Bullion at His Pleaſure.

4. That the Mixed Monie having the Impreſſion and Inſcription of the Queen, and being proclaimed Currant within the Kingdom of *Ireland*, ought to be accepted for Sterling Monie.

5. That although this Mixed Monie was made to be Currant within the Realm of *Ireland* onely, yet it may be called Currant and Lawful Monie of *England*.

6. That althongh at the time of the Contract and Obligation pure Monie of Gold and Silver was Currant, yet the Mixed Monie being eſtabliſhed before the Day of Paiment, the Tender is good, and the Obligee is bound to accept thereof, or is without remedie of any other Paiment.

FINIS.

An EXPLANATION *of ſeveral Words uſed in this* Hiſtory, *as an Eſſay to the larger* Dictionary *of Metallick and Chymical Words, mentioned in the* Preface.

A.

Addit, what: ſee *page* 2.
Adulterate, adulterating.
Adulteration, metaphorically uſed for the undue Mixtures of any thing which is prohibited by Law.
Agriculture, tilling, dreſſing, or manuring Earth, whereby it may be better adorned with varieties.
Alchimiſt, Alchimy. See *Chemiſtry*. *p.* 4. & 43.
Alien, a ſtranger or foreiner, to alien, alienate, or ſell to another, or ſtranger, from *Alienus*.
Amber, *Metallick* or *Electrum*, compounded of Gold and Silver, *vide* Preface.
Architecture, or the Art of building houſes, &c.
Arts Mechanical, vide *p.* 30, 31.
Aſpect, beholding or viewing; *Aſpect* of Stars, is when certain Planets and Signs in Heaven do behold each other; and there are four ſuch Aſpects. 1. *Trine*. 2. *Quartile*. 3. *Sextile*. 4. *Oppoſite* Aſpect, viz. in Books of *Aſtronomy*.

B.

Barmote, vide *Barr-maſter*.
Barr-Maſter or *Barmer*, and *Burgh-Maſter*, *Barrmoote* and *Burghmoote*; *Moote* here ſignifies a Court where the Matters in Controverſie are decided, and as *Hallimoote* is called from *Guild-Hall*, where ſuch *Mootes* are kept, and *Burgh-Moote* from ſuch Burgs, Boroughs or Towns where Courts are kept, ſo *Barrmoote* is only uſed for *Miners*, where they appear at a Barre, and he that gives the ſentence as Superior is called the *Barrmaſter* or *Barmer*, or Ruler of that *Barrmoote* or Court for the *Miners*.
Barrmine, ſuch Mine as is adjudged at their *Barrmoote*.
Bell-metall, how made. *p.* 4.
Bellows, ſuch as blow the fire for melting Metals.
Blocks, what, ſee *p.* 4. we give pieces of wood the ſame name, and they have an Analogie in reſpect of weight.
Boles or *Boleſtids*, are places, where in ancient time, (before Smelting-Mills were invented) the Miners did fine their lead.
Bone-aſhes, or bones burnt, and then beaten ſmall, of which Teſts are made, *vide Teſts*.
Botaniſts, ſuch as deal in Plants.
Braſs, how made, ſee *p.* 4. The Latin word is *Æs*, which is uſually applied to Copper, but improperly; for *Cuprum* is Copper as a ſimple Metall, and *Æs* braſs, a compound Metal of Copper and *Lapis Calaminaris*, and this word *Braſs* having no affinity with the Latin words *Cuprum* or *Æs*; it is probable that Compoſition was known before the *Romans* time, and ſo never altered its name, and ſo of Gold and Silver. See *Copper*.
Bowle, or diſh, which is a certain meaſure, wherewith the Miner uſe to meaſure out the duties to the Church and King, reſerved from the Oar as Tythe, containing about half a peck.
Bullion, what: ſee *pag.* 40.
Burghmaſter, ſee *Barmaſter*.
Cakes, what, ſee *p.* 4. call'd ſo in relation to their form round and flat, in part convex.
Calefaction, calefying, or making warm.
Cards, which are certain pieces of board, whereon wire is fixt, ſo as

to kemb out wooll, and fit it for making of woollen clothes. And are ſure Cards, Cards of labour and profit, not of pleaſure and idleneſs. See *Wire*.

Carriers. See *p.* 39.

Caſt-works: ſuch Metals as are not Malleable, or apt to be beaten, by reaſon of their fragile or brittle nature, and are therefore caſt into Plates or formes fit to be cut into Wire, or other uſes.

Cephalicks, Cures of Diſeaſes belonging to the head. *p.* 5.

Chymiſtry, Chymick, Chymical, or *Chemiſtry*. The Art of ſeparating Metals. See *Alchimy*.

Cinders, the ſcum or refuſe of Iron which is burnt.

Circuit, Circuity, a compaſſing, or going about.

Coale, 1. Black, ſuch as is burnt or charke. 2. White, which is only baked in an Oven to make it dry for fewell.

Cœleſtial, things belonging to Heaven, from *Cœlum*.

Condenſation, or being more hard or thick.

Conflagration, when all things ſhall conſume together, as at the laſt day of Judgement.

Cope, from *Copia* plenty. See *p.* 89.

Copper, conſiſts moſt of ſulphur, this is like to come from the Latin word *Cuprum*, and taught us by the *Romans*. See *Braſs*.

Cordials, things which comfort the Heart. *p.* 5.

Coves, are houſes that the Miners build over their Groves, and not ſuch as give milk; I ſuppoſe rather *Coves Coverings*.

Coyn, to coyne, coynage. *p.* 40. 42. 56.

D.

Dyalling of Mines, what, ſee *p.* 2. which is done with the like Inſtruments of Art, by which Sun-dials or ſurveighing of ground is performed, *p.* 2. See *G. Agricola*.

Diſcoverer, is any perſon who doth finde out a Metal or Mineral which was covered, and diſcovers or reveals it to the Proprietor of the ground, or to the *Societies*, &c.

Domeſtick, or that which concerns buſineſs at home.

E.

Efflaxion, which flows from a thing as ſweat from the body.

Elixer. See *Quintiſſence*.

Ens veneris. *p.* 5.

Epileptick (from *Epilepſie*) Cures for the falling ſickneſs. *p.* 5.

Euchariſt, or the Sacrament of the Body and Blood of Chriſt. See *Tranſubſtantiation*.

Ewers, vide *Ores*. *p.* 57.

Exceſſion, that which grows naturally, or by force of Art, out of any thing.

Exhauſtion, to exhauſt, exhauſting or drawing out.

Extraction, or drawing by force, alſo to extract, Extractings.

Extrinſick, or outward.

F.

Fuell, or Materials wherewith to ſupply or continue fires, whether wood or any other combuſtibles.

G.

Genuine, or natural, from *Genus*, its proper kinde.

Gold, the moſt perfect of all Metals, it comes not from *Aurum* the Latin word, which ſhews the *Romans* had little uſe of it here, or it had a name with us before their Language.

Grove is the Pit that leads down to the Mine.

H.

Hypocondriacks, diſeaſes relating to the ſpleen. *p.* 5.

Hyſterick Paſſions, ſuch as the Diſeaſes called the Mother, Convulſions, &c.

I.

Incorporation, Corporation, Incorporating, are embodying ſeveral men into a joynt Company, or Society, for the carrying on ſome Affair, and the perſon ſo incorporated called a Corporators, or Incorporators.

Ingots,

Ingotts, or ſilver melted into proporportions, fit to be cut into coyn. See *p.* 40.

Intrinſick, or inward.

Iron, ſeems to be a word which is more ancient then the *Roman* Language, which terms it *ferrum*, unleſs *ferrum* be called *Iron* by way of *Irony*.

L.

Latin, is braſs coloured over with oare, it is only caſt, and is too brittle to endure the hammer: How the word hath relation to the *Roman* Language is to be enquired.

Lead ſeems to be a word alſo with us more ancient then the *Roman* Language, which calls it *Plumbum*.

Leſſees, ſuch as take Leaſes from others, or of any Mines from the Societies, with Covenants to work the ſame, and pay the Kings duties, &c.

Letters Pattents, *Litera Patentes*, or Writing, ſealed with the broad Seal of *England*, whereby men are authoriſed to do or enjoy any thing, that otherwiſe of themſelves they could not do; there are four ſorts mentioned in this Hiſtory: Firſt, of the Mines Royal, *p.* 49. 54. 62. Secondly, of the Society of the Mineral and Battry-works, *p.* 57. 60, 65. Thirdly, of the Society of the Royal Company, *p.* 27. And fourthly, of the Royal Company, *p.* 17.

Ligament, a mineral word from *Liga*, where the Compoſition of Metals binde together more firm.

Liquidity, *Liquidities*, liquid or moiſtning.

M.

Manufactures, ſuch uſeful Arts as are performed by the labour or action of the hand.

Mediterranean, that part of the Earth which is between the Center and the Surface of the Earth.

Meere, 29 yards is a Meer in the low Peak, 31 in the high Peak, and the bredth is from skirt to skirt, in a rake or Pipe-work, and in a flat work.

Metalliſts, ſuch as deal in Metals.

Metals of ſeven ſorts, *vide* Preface, and *p.* 3. 6, 7. the diſtinction of which are referred to the intended Dictionary of *Metallicks*, or pertaining to *Metals*.

Metals Artificial. *p.* 43.

Mines, what, *vide p.* 1.

Mine Royal, and *poor-Mine*, vide *p* 9. & 52.

Minerals, the ſeveral ſorts, ſee *p.* 5, 6. 7 the definitions of which are referred to the intended Dictionary.

Mineraliſt, ſuch as deal in Minerals.

Mint, ſee *p* 40.

Mony, ſee *p.* 42, 43.

Multiplication of Coyn, ſee *p.* 43.

N.

Needle, a piece of Iron fixt on a Center with which Marriners, Surveyors, and Diallers uſe to ſhew the North and South-points: The word is alſo uſed for an inſtrument wherewith men and women ſew garments.

O.

Ores, what, and the ſorts of them, *vide p.* 2, 3. the word is alſo uſed for oars which Watermen uſe, only differs in Orthography. Glance-ore, white-ore, which ſometimes are called *Ewres*, ſee *p.* 49.

Oſtiology, or a diſcourſe of the nature of bones.

P.

Pale of *Ireland*, ſee *p* 8.

Parliament or *Parlement*. ib.

Patents, vide *Letters Pattents*.

Petrifying, petrefaction, or turning ſoft or liquid ſubſtances into more hard or ſtonie, from *Petra* a Rock.

Pewter, vide *p* 4.

Philoſophers ſtone, ſee *Quinteſſence*.

Piggs of Lead, ſee *p.* 4. ſome call them *Sows*, with ſome Analogy to Ani-

mals of that name, in relation to their production.

Pitts, what, ſee *p* 1. ſomtimes taken for places which hold water, which are digged with *Spitts* or *Spades*.

Pores, are certain viſible or inviſible holes in the bodies of all ſublunary Creatures through which they ſend out a certain breath or Liquid matter.

Practical or *Practick* learning, or the Theory, or Theorems of Arts which may be put in practice, *vid.* Theory.

Pre Emption, a power given for one to buy any thing before an other.

Prerogative, is that eſpecial power, preheminence or priviledge which the King hath in any kind over and above others, and above the ordinary courſe of the common law, in right of his Crown, wherein he is only ſubject to God

Proprietor, he who hath the property or right of the ſoil, wherein a Mine lies hid, or diſcovered.

Q.

Quarry, what, *vid. p* 1.

Quick-Silver, ſeems to be a word uſed by us more ancient then the Roman language, which calls it *Argentum Vivum*, or Living Silver, which we call quick by reaſon of its nimble and active power, and therefore by ſome called *Mercury*. See *Silver*.

Quinteſcence, *Elixir*, or the Philoſophers Stone, is a 5*th* ſpirit that doth tie the ſpirits of the four Elements together, and as the four Elements are in ſome proportions in all bodies, ſo is this ſpirit, and it is the Art of the Philoſopher to extract this ſpirit out of any body, and that 5*th*. ſpirit which they extract out of Mettalls is this Quinteſcence, or five ſpirits, by which ſuch Miracles are to be effected, *vid. p* 44, 45. See *Elixir*.

R.

Rake, is a vein of Oar that lieth between two *Wonghs*, that is not covered with a lid ſtone, and not a Rake made with teeth.

Reaſſume, *Reaſſuming*, Reſumption not a taking a thing back again, which was formerly given or graunted.

Refiner or to refine, is he that melts Mettal again, to bring it into a more pure ſubſtance.

Reſplendency, *Reſplendant*, ſplendid or ſplendour, is that which affoards great brightneſs, ſo that Reſplendency is to be underſtood double that brightneſs, and ſo in other words, where the addition of *Re*, guides the word.

S.

Sledges, ſuch wherewith in many places they draw weights, where Carts, Tumbrells, &c. are not uſed.

Sciences, the 7 Liberal. *vid. p* 30. and 31.

Shade, or glittering Earth, being as it were the ſhadow of a greater light.

Shafts, what, ſee *p* 2.

Silver, begotten of Quickſilver and Sulphur, it comes not from *Argentum*, the *Lattin* word, which ſhews it was not in uſe before the Romans, or at leaſt had that name before them. See *Quick-ſilver*.

Slaggs, is the droſs remaining after melting or refining Lead, &c.

Smelt, or *Melt*, thence a Smelter or Melter.

Specimen, a proof or example.

Speculation, ſpeculating or beholding any thing as in a glaſs face to face, and ſomtimes a meer viſion of the Minde.

Sophiſticate, to imitate the wiſdome of Naure, by ſome falſe or counterfeit Art.

Spadiardo, ſuch as dig with Spades *p*. 81.

Stannaries, from *Stannum* Tin, See Tin,

Standard, Money according to the Standard, is that which the State doth allow to be the mixture, as if 10 parts of Silver and 2 of Copper to 12 *d*. or more or leſs as the State pleaſe to decree: The word is alſo uſed in martial affairs, as the Kings Standard, which carries his Colours,

lours, as money doth, his Superſcription.

Stampers, ſuch as beat the Oar ſmall and fit for the Waſhers.

Steel, natural and artificial, ſee p. 4 and hath no affinity with the Latin word *chalybs*.

Stow, to ſtow is to ſet pieces of wood upon the Grove or Pit, or the place where the Miners do intend to make a Pit, ſo as to lay a turn-tree and rope, whereby to draw Earth or Myne out of the Grove.

Subterraneau, that which is in and under the Earth, and under the ſurface thereof.

Superficies or *Surface*, that which appears firſt to the eye of a thing repreſented unto it.

Swords, whereby is here to be underſtood ſomewhat belonging to the *Bellows*, and not weapons offenſive or defenſive, or rather *Soards* from *Soare*, or the ariſing and depreſſion which cauſe their ſufflation of the fire, and ſo melts the Oare.

Synonima, or of like name.

T.

Terreſtrial, or things belonging to the Earth, and Terrene.

Teſts, are made of bone-aſhes mixt with water, of ſeveral proportions great or ſmall, wherein Metal is eſſayed in ſmall parts, or melted and refined at large.

Theory is the conſideration of what may be put into practice, *vide Practice*.

Tin, Tinners, Stannaries, vide p. 12. & 79.

Touch, from Touchſtone, upon which if Gold or Silver be rub'd, the true is more eaſily diſtinguiſhed from the falſe.

Tranſubſtantiate, or Tranſubſtantiation, or Tranſubſtantiating, is to alter the ſubſtance of a thing, or tranſfer it from one ſubſtance to another, as making Gold of Silver, &c. See p. 44. and *Euchariſt*.

Tun is 20 hundred weight, or four Hogſheads, or 12 ſcore and 12 Gallons.

V.

Veins of Metal, ſee p. 2.

Virgula Divina, ſee the *Preface*.

Vocabulary, a recital of words.

Utenſils, properly uſed for things of uſe, belonging to houſe-keeping, but generally uſed for the tools belonging to any trade.

W.

Waſh, the Metalliſts uſually, when their oar is ſtampt ſmall, do put it into a ſieve, and poure water on it, which waſhes the durt from the Oar.

Winlace, or an Engine to winde up weights, or any thing elſe withal.

Wier, there is a Prohibition of forein wire in the fourth of *Edw.* the fourth, and in the 29. of *Eliz.* and other Statutes; but I finde not in any of our Dictionaries, *Engliſh* or *Latin*, the word *Wire*, but in the *Italian*, (who uſe no *W.*) it is *virare*, to veer, or *vertere*, to turn, or draw any thing round, and ſo is Wire, and the *French* call the drawing of Wire, *Tirare*, *T* and *V*, being the ſame in their dialect, ſo that *Vier* or *Wire* intends the ſame thing, and *Walton* in all his Tranſlations of the 7 Oriental Tongus, calls Wire only *filum*, and *Jun. & Tremel. filamentum*, or Metal drawn out like a Thred, from whence we call ſmall wire, thread of Wyer. The reaſon of prohibiting forein wier, is becauſe it is ſo weak and flexible, that it doth not kemb

the wool as it ought to be, whereas English wire is strong and more fit for that purpose, and these wiers are framed with pieces of flat boards, which are called Cards. See *Cards*.

Wrought, or Wall of the Groves.

Y.

Yeaked, is to set pieces of Wood joyned together within the Grove, to prevent the Earth falling.

COR

CORRIGENDA.

PAg. 5. line 28. read *Cephalicks* p. 7. l. 36. r. *Mines lie, are.* p. 18. l. 17 r. *Tin.* p. 32. l. 22 r. *Receive supplies* p 33. l. 25. r. *Abertivy* in *Wales.* p. 37. l. 22. r. *At the Red* p. 38. l. 4. r. *great Treve* p. 42. l. 19. r. *As Verstegan* p. 44. r. *Maps of Tallibont, and the darreia Hills, and Roman works.* p. 51. l. 4. r. *For every.* p. 60. l. 30. r. *Person Knight.* p. 73. l. 19. r. *given them.* p. 79. l. 26. r. *Melting.* p. 86. l. 8. r. *be not.* l. 25. *dele but.* p. 87. l. 4. r. *carry from.* p. 86. l. 6, 10, 14. r. *Cope.* p. 99. l. 30. r. *Is to pay.* p. 105. l. 9. r. *Cuniculi.* p. 108. l. 5. r. *Resolution.* l. 19. *Person.*

FINIS.